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ABSTRACT

The School Personnel Utilization Project developed a series of modules to assist personnel in building the necessary skills for the development of organizational change strategies and collaborative, collegial educational problem solving capabilities. This module focuses on the dynamics of organizational change and the interpersonal skills necessary to bring it about. The first two sections describe some of the organizational characteristics which facilitate and constrain change. This is followed by materials on aspects of goal setting, group formulation for organizational change, and information management. The final three sections are intended to provide practical exercises in the application of the concepts considered earlier together with suggestions on how the process may be implemented within a school or school district. (Author/DGC)

ED101700

SYSTEM RENEWAL

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FOREWORD

This training module is the result of the needs and desired outcomes of the School Personnel Utilization (differentiated staffing) program which was funded by the U.S. Office of Education to develop alternative staffing patterns for schools. During the course of the design and development of differentiated staffing programs around the country several key components were identified as necessary for change in school-based and district-level settings. The funded School Personnel Utilization Projects in conjunction with the National Cluster Coordination Center and the U.S. Office of Education began a series of developmental activities which culminated in training materials for teachers and administrators. These training materials when utilized provide critical and essential skills necessary for the development of change strategies or collaborative, collegial educational problem solving. Contained within the context of the series of training modules is virtually within every skill needed for a systematic approach to meeting the educational needs of students through more effective school personnel utilization.

These modules are not designed to be the panacea for training teachers and administrators but rather serve as a focus on specific skills which were identified by school-based personnel as crucial in a change effort. This is not the whole story of the activities and accomplishments of the School Personnel Utilization program but is only a small part of what took place over a period of five years (1968-73). It was the desire of the Project Directors, the Director of the National Cluster Coordination Center and the Program Officer of the U.S.O.E. in planning their efforts to contribute to the body of knowledge which has been building regarding alternatives to managing needed educational change.

It is hoped that through these training materials the School Personnel Utilization concepts and accomplishments will go beyond the federal funding of projects and beyond the boundaries of isolated innovative efforts.

Raymond G. Melton *

Marshall L. Frinks **

Training Modules Available

System Renewal
Functional Task Analysis
Shared Decision-Making
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Organizational Crisis Intervention

Write to:

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* Dr. Melton is the former Director of the National Cluster Coordination Center which served as the leadership training institute for the funded projects.

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SYSTEM RENEWAL

(A Module for Planning Change)

By

Dale G. Lake
Geraldine S. Lake
Ronald Lippitt

With
Field Testing and Examples

From

Ted Tchack
Stuart Doig

September, 1974

We wish to dedicate this manual to Robert S. Fox (d. 1973) who participated actively in its design and outline but whose early demise kept him from realizing the fruition of his labors.

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USERS GUIDE

This manual will probably be most useful if thought of as a reference manual rather than a book. In constructing the manual we have tried to aim at a wide-ranging audience. This means, naturally that some of what is produced here will be too elementary for some and too esoteric for others. In order to save you time and to highlight objectives, we have abstracted each chapter in this initial guide so that you may be able to decide prior to actually reading a chapter whether it will be of value to you.

CHAPTER I Some Cautions for Agents of Change

Chapter I offers the user an introduction to the following: initiations of planned change, change orientations, problem solving, resistances to change, and the promotion of change. It presents the writers' perspective that change, though necessary, is not likely to occur without resistance and conflict. The change agent must be equipped with the tools to overcome such difficulties. Hence, the manual, i.e., the tools of change for the agent to commitment.

CHAPTER II Task and Process: Two Sides of Problem Solving

In this chapter a logical path is developed for guidance through change efforts. The path is called problem solving and involves both concept and practices for (1) accepting the problem, (2) analyzing it, (3) defining it, (4) developing new ideas for solving it, (5) selecting change strategies, (6) implementing and (7) evaluating.

However, it is an emotional process involving hopes, expectations, fears, discouragement, conflict and competition. This chapter prepares the agent of change to cope with both the logic and "psycho-logic" of change.

CHAPTER III Finding and Deciding on Our Goals

In contrast to the first two chapters, Chapter III has it focus on "how-to-do-it." It suggests a number of procedures that groups can utilize in order to identify their goals. Goal sources are identified; activities and procedures are described about each source to allow the user to gather ideas from the source and to organize these ideas into workable goals. This chapter introduces the reader to "exercises." i.e., specific written tasks for use in actual change efforts.

CHAPTER IV Team Building

This chapter recognizes that most complex efforts at changing will require the resources of a group rather than an individual. It provides both concepts for understanding teams and specific measurement procedures for analyzing the progress of teams. The user of this chapter should be able to identify the major issues of team development and be able to use at least one procedure for each issue to overcome obstacles for team development

CHAPTER V Information Management

Chapter V contains both ideas and exercises regarding the management of information for use in evaluation. The chapter describes the unique requirements for evaluation as the problem solving approach to change is implemented. Simply stated, the chapter aids the user in identifying WHO needs WHAT information WHEN, in order to make the next evaluative decision. Worksheet exercises are included to aid the user at the different steps in information management.

CHAPTER VI Taking Action

Chapter VI is primarily an exercise chapter helping the user turn ideas into action steps in an orderly, efficient manner. Exercises are supplied to aid in activity identification, activity flow, time, dollar, and role allocations. With this chapter, your plan will go from hypothetical exercise to concrete actions.

CHAPTER VII The Support for Implementation Effort

Chapter VII is primarily an idea chapter with exercises designed to help the user develop task oriented support that is concerned with problems of competence and action skill, and process oriented support that is concerned with risk-taking attitudes, motivation, temptation to give up and interpersonal relations. Suggestions are made as to how to try out support gaining ideas in low risk practice situations.

CHAPTER VIII Continuity and Closure in Educational Development

Chapter VIII reviews techniques to help your team (1) continue to revise and improve the innovation, (2) spread it to others in the system, (3) make it an available resource for educators elsewhere who are in need of such a resource, and if necessary (4) deliberately phase out or terminate the innovation as new alternatives become available.

RESOURCE BANK: SEARCHING THE ERIC INFORMATION BANK

The Educational Resources and Information Center (ERIC) is a major resource. It has speeded up the sharing of research findings, creative ideas and practices in education by identifying, indexing and abstracting research reports, curriculum materials, working papers and journal articles and making them available to the classroom teacher and school administrator.

Participants who have not used ERIC may wish to read the brief manual Every Man's Guide to the Use of ERIC. It describes the steps to be taken in finding the documents relevant to one's problem.

A list of ERIC Clearinghouses is included in the Resource Bank. Research in Education (RIE) of course, does contain printed abstracts of each document.

An alternative to doing one's own search, is to contact one of the facilities that provides computerized search services. One of these that will respond to requests from any part of the country is:

Northern Colorado Educational Board of
Cooperative Services
Longmont, Colorado

They will do a computer search of all the ERIC documents in RIE which deal with the question you pose and mail you a print out of the abstract of each for a fee of $17.50. A similar fee is charged for a search of the CIJE tapes for journal articles.

The Resource Bank of this manual is a listing of bibliographies, indexes and compilations of resources available in relation to a number of subject categories. The list was obtained for the most part through a computerized ERIC search. You may find, in this listing, a bibliography which will save you time in identifying potential resources for your problem solving effort.

CHAPTER I

Some Cautions For Agents Of Change

INTRODUCTION

A seventh grade math teacher decides that his instruction is too slow and repetitive for his brightest students and too demanding for a few of the slowest. He divides the class into four groups, gives each an assignment to be completed within a week, appoints a leader for each group, and tries to divide his own time equally among them. Before the week is over, the groups are beset by arguments, silliness and frustration. The teacher calls an angry halt to the experiment and warns the class that from now on they will proceed at the pace he sets for them and that there will be "no more of this unsupervised activity in my class."

A high school principal is summoned by the board of education and told that they are concerned with the lack of innovation in his school. Neighboring districts have been experimenting with open classroom techniques, modular scheduling, work-study programs and the like. He appoints a committee to visit other schools, to invite consultants to meet with them and to propose new programs. A year and a half later, they are still meeting, but, by now, infrequently and irregularly, and their meetings are superficial and repetitive. They are going through the motions, but each one secretly wishes that in a few months the entire enterprise would be forgotten.

A group of parents of elementary school children have been growing increasingly hostile toward the school since bussing was introduced to balance the school racially. They were told that the purpose of the bussing was to enable deprived children from another neighborhood to benefit from the excellent program offered by the school their children have been attending. What has happened instead is that a number of respected teachers have left, discipline in the school has deteriorated and the level of instruction has fallen almost to that which characterized the "other school." The parents have tried reasoning, argument and even a quiet demonstration. Now they are on the verge of a militancy that can only bring further discord and frustration.

These are but three examples of conditions that afflict so many of our schools today. The great need for change in our schools is everywhere apparent; teachers and administrators are willing, in many cases eager, to work toward bringing this change about; and there is widespread evidence that parents and students will support even radical change. Yet the record for public school innovation is not a particularly good one. Despite the willingness to commit time, energy and resources to the planning and implementation of new programs and new methods, such commitments too often end in cynicism and, ultimately, failure.

The writers of this manual are convinced, however, that not only is the time ripe for change, and not only are there many hard-working people ready to devote time and effort to improving their schools; there is also, at present, a greater understanding of the nature of change and the factors which contribute to successful change in educational institutions. The basic problem as we see it is the unavailability of this information to those who can best use it. Hence, this manual. It is our hope that teachers, students, administrators, parents, school-board members and scholars interested in change will be able to derive from this manual the information, skills, strategies and attitudes that will help them create the improvements they desire.

We are convinced that no change effort has much chance of success unless those instituting the change are clear about their goals, are able to put together a team that understands and accepts these goals, and are able to evaluate their work continually so that they may be able to decide how successfully they are carrying out these goals, whether they need new personnel and resources, or whether they should change or even abandon their goals. Another look at the three examples with which this chapter started will reveal that, had the individuals involved known more about the nature of change and effective ways of overcoming resistance to it, their attempts to improve their programs would have had far better success.

PERSPECTIVES

Initiating Planned Change

Whatever else can be said about planned change, we know it happens when persons who have energy, expressed as skills are combined with resources of information, dollars, materials and facilities.

Contrary to much literature, a planned change effort does not always start with a clear goal. Even less often, planned change begins with behavioral objectives. Rather, words which more nearly catch the flavor of a beginning change effort are: straining, storming, creating, forming. That is to say, it is often the process of confronting conditions and practices that "do not seem to go right" that gives birth to new ideas and/or practices which later can be formulated as goals and objectives.

Change Orientations

Scholars who have studied planned change agree that there seem to be three basic theoretical orientations. The first is that of Research and Development; this orientation has given birth to the growth of technology as in the space industry. It involves doing basic research, developing products from research findings and disseminating such products. It has been connected with computer aided instruction and modular scheduling in education. However, as a change orientation, it has had limited success in education. It seems that principals and teachers often reject products that have been developed in other settings whereas an improved voltmeter will be used by anyone who has need for it.

A second orientation that has worked effectively in agriculture and in dissemination of new drugs by doctors is referred to as the Social Interaction Process. The idea is that innovations are passed from person to person and across institutions by opinion leaders. Again, while this orientation is perhaps more useful for educators, and more widely used in educational professional meetings, it still remains a fact that ideas about educational practices do not seem to "catch on" as readily as do new medical practices.

More recently, some who would change education have been arguing that the situation in education is that most teachers and principals are making a real effort to cope with the many problems which arise in teaching. Therefore, the way to encourage and support change is to increase their Problem Solving Skills.

Problem Solving

Within the cadre of scholars who have developed problem solving approaches to planned change, two different groups may be identified. In the first group are those who advocate a system approach to problem solving. Two leaders in this approach are Roger Kaufman of the United States International University and Robert Corrigan of Corrigan Associates. They conceive of problem solving as proceeding through five or six logical steps such as:

1.0 Identify problems from needs.

2.0 Determine solution requirements and alternatives.

3.0 Select solution strategy.

4.0 Implement strategy.

5.0 Determine performance effectiveness.

6.0 Revise as required.

In the second group are persons who would trace their conceptual roots to John Dewey and Kurt Lewin. This group of persons represented by Goodwin Watson, Ronald Lippitt, Robert Fox, Charles Jung, Matthew Miles and Dale Lake agree with the basic logic of the system approach six step models, but they have emphasized the social psychology of changing; i. e., how people feel about problem solving, how involvement and commitment are developed in problem solving; in short, they have emphasized the human side of problem solving. The basic orientation of this manual is that of problem solving as both a logical and psychological activity.

Resistance to Change

A continuing problem faced by all who plan change is the resistance to their efforts they experience. We are much indebted to Goodwin Watson (1966) who has helped us to understand some of the forces which prevent or resist change.

Watson is quick to point out that resistance to change is "bad" only from the point of view of the advocate of change. Indeed, the very forces that act on us and within us to resist change are the forces that will help us maintain a change once it has been achieved. It also turns out that forces within persons for resisting change are really quite natural. Watson notes:

> Some of the stabilizing forces within organisms have been described by Cannon (1932) as "homeostasis." The human body has built-in regulatory mechanisms for keeping fairly constant such physiological states as temperature or blood sugar. Exercise increases pulse rate, but "resistance" to this change presently brings the heart-beat back to normal. p. 489

Resistances most often encountered in the individual are habit, primacy, selective perception and retention. Most learning theories include the concept of habit. It is the successful repetition of a particular behavior which, although originally connected to some sort of reward, seems to persist without further reward. Primacy is simply a word to acknowledge that the way persons first successfully cope with a situation sets a pattern which is unusually persistent. (For instance, it is often observed that teachers, despite in-service courses and supervisory efforts, continue to teach as they themselves were taught.) Finally, there is now a considerable body of research to show that once an attitude has been set up, a person responds to other suggestions within the framework of his or her established outlook. Many experiments now exist which show that subjects did not hear clearly, nor remember well, communications with which they disagreed. It has also been observed more casually that thousands of teachers who are exposed in graduate courses to different philosophies of education from those that teachers are accustomed to employ, may do very well at answering test questions about the new approach, but they carefully segregate in their minds the new as "theory which, of course, would not work in the practical situation."

Watson has also described resistance forces which are more often associated with the group or organization. Some of these are very important and encountered in nearly every change effort which involves more than one person. One such force is norms. Norms in groups or systems correspond to habits in individuals. Persons who work or interact with one another over time develop preferred ways of coping; such preferences become unwritten expectations that are developed for one another's behavior. Usually a single individual cannot change norms. Natural observations of working groups have shown that group norms can control such factors as rate of production, dress styles, choice of car, etc.

Other aspects of social systems which make them resistant to change are vested interests, the sacrosanct, and rejection of outsiders. Perhaps vested interests are self evident; sacrosanct refers to those areas of behavior which are held to be sacred. For example, many of the current cries of invasion of "academic freedom" come from those who are being asked to be held accountable for what they produce in the way of student learning. In such instances it is difficult to determine what the facts are because the combination of vested interest and what is viewed as an attack on the sacrosanct does much to distort.

Finally, one of the most pervasive findings in education research on change is that human beings are suspicious and hostile toward strangers or outsiders. A typical attack on any new proposal is that it doesn't fit our local situation. Sometimes insiders are accused of having been "addled" by some experience that they have had and their efforts to change are passed off as temporary insanity. Jokingly, Watson refers to this resistant force as NIH (not invented here). A reciprocal phenomenon has also been observed in which the inventor is often more sought after outside his own school than inside it. Many innovators report having hordes of visitors, but none from their home system.

Promotion of Change

Even with all of the above resistances in mind there are many reasons change does occur. One of the most powerful forces for change is the basic human motivation to close the gap between "what might be" and "what now is". Some may call this the aspiration to leave the world a little better than when we entered it.

Psychologists have also identified a number of natural sources of motivation which help to initiate change. They are the needs to achieve, affiliate and influence. Each of us usually has a mixture of these needs operating in us at any given time and change efforts may be seen as opportunities to exercise such needs.

Finally, the environment we now live in places survival demands upon us to change. Some say we have either to change or pass the way of the dinosaur. As a parent, I hated having to work with my elementary school aged son as he was doing math with base four or base twelve, and yet I had had enough experience with computers to recognize the potential significance of such math. How much greater must the dilemma be for those who have had to relearn how to teach such math.

Concluding Perspectives

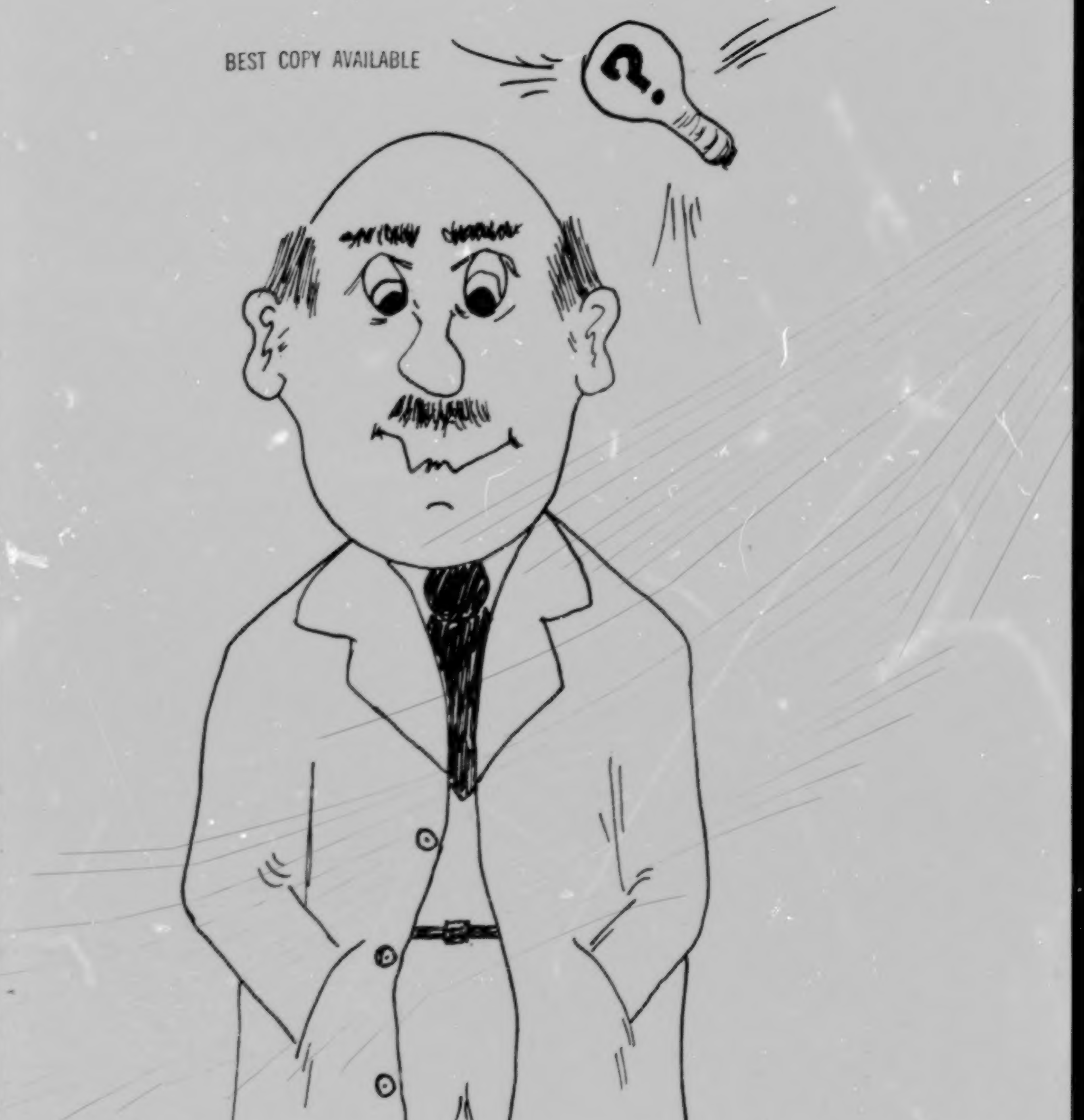
Returning to the three examples this chapter began with -- the math teacher, who tries using small groups; the principal "ordered" to be innovative and the new bussing program; -- let's try to link these examples to the ideas presented.

The math teacher never anticipated that the students might be resistant to his new approaches. Collectively the students did not share his "diagnosis" that "his instruction was too slow and repetitive for his brightest students and too demanding for the slowest." Nor did the instructor consider how the new structure, i.e., using small groups, might reward students' natural needs to achieve, affiliate and influence. Had the instructor recognized that any change will bring resistance and that the resistance itself can be used to clarify goals by forcing the promoter of change to answer such questions as "Why are we doing this?" "What will I get out of it if I do change?"; he would have been prepared for resistance and might have found ways to help his students face the "ordeal of change".

In the second example, the principal ordered to be innovative, the failure begins with the board. They offered no positive reasons for change. Their only reason was that "neighboring districts" are experimenting. Was there a real need for innovation? Aren't they implying to the principal -- be innovative or find a new job! Under such conditions the committee stood very little chance of engaging in productive problem solving; i.e., analyzing needs, developing alternatives, and taking action.

In the last example of bussing, one of the most pervasive aspects of change is illustrated. Change means conflict! The management of conflict is a core requirement for change to be successful. So often the designers of change imagine that their bright new idea will be readily accepted and refuse to acknowledge what was reviewed in this chapter; namely, persons form habits which are both useful to them but make new behavior difficult, persons screen new ideas through their old attitudes and thus never receive new ideas with "open minds", persons also remember what is congruent with their values and thus may miss the central meaning of new ideas.

To summarize our perspective, our view is that change, though necessary, is not likely to occur unless the change agent is aware that change efforts will bring resistance and conflict and is equipped with the tools to overcome such resistance and conflict. Given all that we know about the failure to change and the resistance to change only the change agent's own commitment will make success possible. If commitment is high, then we think that the change agent will find what follows provides the tools to promote change.



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Ernst

CHAPTER II

Task and Process: Two Sides of Problem Solving

Changing bureaucratic institutions such as our schools is always difficult. Money is often a problem; so are limited space and equipment. But by far the greatest difficulties are caused by people. Not only are many people within an organization resistant to change, those who are attempting the change may themselves be driven by motivations so complex that they will undermine their own efforts repeatedly. The following was written by an eleventh grade girl after she had participated in an experimental biology class. The class's goal was to become more democratic in its decision making so that the students could share with the teacher responsibility for operating the class:

> I looked forward to my biology class with great enthusiasm. I wanted it to be a year full of achievements and learning experiences, even better than the seventh grade science class I had enjoyed so. However, I was quickly disappointed; the relationship between the teacher and students rapidly deteriorated. What was to have been a successful year turned into a disastrous one.
>
> I came into class the first day, took a seat and waited for the teacher to begin. Mr. B. came into the room smiling, introduced himself (told the class to call him by his first name), and passed out the textbooks. He told the class to look through them and tell him what we wanted to learn. It was decided that he would teach us the first five chapters the way one would ordinarily do, then we would discuss how to proceed for the rest of the year. After the initial few weeks, the class and Mr. B. met together to talk of evaluations. We all wanted to know how we would be graded for our work. After a week or more of hassling over various suggestions, we decided on a system for the first quarter. In groups of five or six, we would review our lab reports with answer keys Mr. B. had given us, combine them with our test averages, and come up with

> a grade we felt we deserved. As it turned out, only one group took the answer keys and met to go over the lab reports. Yet we all handed in the grades we wanted (mostly A's and B's). Mr. B. became very angry, insisted that we hand back all our lab reports and told us that he would mark us the way he wanted to.
>
> The next few weeks set the pattern for the rest of the year. The class and Mr. B. met constantly, trying to battle out our differences and the question of evaluations. Tension only increased -- we were two opposing forces pulling in opposite directions. But the situation was at a stalemate; nobody got anywhere. There was not one bit of trust between the class and the teacher.
>
> When I remember what happened now, I think that Mr. B. must have felt betrayed by the class, angry and maybe guilty. A sense of failure prevailed. Another attempt for a successful class was not made; it was all down hill from then on. The class was handled in a strict authoritarian manner. The excitement I had felt at the beginning of the year dwindled. I gave up any chance of learning that year and did not enter into chemistry the next.

This account highlights that: the best intentions, the finest facilities, the most adequate funding and the greatest expertise cannot improve an organization unless the people involved have the training and the desire to examine themselves and their interactions continuously. What is more, anyone engaged in a change process must be prepared to change himself when that is necessary for the good of the project.

This examination of individual and group behavior we refer to as "process". A healthily functioning group pays as much attention to its process as it does to the work to be done; process means the way in which it is being done: quickly, enthusiastically, reluctantly, superficially, etc. And the process is dependent on the emotional make-up of each individual involved, the interpersonal relations among the members of the team of innovators, and the ways in which they all respond to the pressures which accompany organizational change.

Let us look once again at the example of the biology class presented at the beginning of this chapter. Had the teacher been more tolerant of the students and more patient with their initial tendencies to avoid responsibility, he would have felt less betrayed by them. And had the students not felt so guilty and, therefore, resentful, they probably would have been able to try again. Their task was clear, and all -- teacher and students -- agreed it was worthwhile. But the inability to deal openly and objectively with their feelings caused their efforts to degenerate into profitless power struggles. When there is affection and trust in a group, there is a good chance for the successful completion of the task. Bitter power struggles will almost always erode whatever trust and affection exists, and, even if the group should complete its work (which is unlikely), no one will feel very good about it.

A well functioning group is very much like a healthy body -- the will directs behavior and the various parts of the body work harmoniously to carry out the will's desires. But even if every part of the body can function properly, the task will not be done well unless the nervous system is also functioning properly. It is the job of the nervous system to carry information from the brain to all parts of the body and back to the brain. So, too, in any team, information must flow freely and clearly from individual to individual. If anyone in the group is not heard well, or if anyone feels prevented from expressing himself openly, sooner or later (probably sooner) that individual will begin to affect the group much as a neglected part of the body begins to affect the entire organism. Every team must have an information system that guides decision making. As each new action in a change effort is taken, many questions arise: "Was that the right action?" "Did it move us closer to our goals?" "Do we need to re-examine our goals?" "How do we who took the action feel about it?" "What is the next step we must take?" Such questions must be anticipated and methods developed for collecting and interpreting the information necessary for answering them. Such methods are the focus of this manual.

A Formula for Change

To bring about change in school systems, to renew them, the following ingredients are needed: (1) goals which can be subdivided into a logical set of tasks and sequenced over time; (2) procedures which support the goals to be accomplished; and (3) information which can be used to (a) detect whether change is occuring, (b) describe what has happened and (c) guide decisions as they are made in the change process. Each of these ingredients has task and process components, for example examine Figure 1.

Figure 1

	Task	Process
1) Goals	What are they? What is to be achieved? When will they be accomplished?	Who is committed to them? How clear are they? Who created them?
2) Procedures	What is the best logical arrangement? Which alternative is most cost effective?	How do people feel about using these procedures?
3) Information	What is to be communicated? Which is the best channel? What is the best way to package it?	Who is the sender? Who is the receiver? Who has the authority to make decisions? Is it useful?

This manual attempts to provide tools for improving both task and process in the planning and implementation of change. For instance, in the next chapter the reader will find practical ways to identify and create goals while at the same time building commitment to them. Later chapters will suggest procedures which break goals into manageable tasks and also suggest ways of assigning tasks to people which promote their involvement and build on their strengths. Still other chapters present a view of evaluation as a set of procedures for providing information for the decisions that must be made as a change effort evolves. But, before moving to such chapters there is a need to better understand problem solving because it underlies all of the subsequent chapters.

Problem Solving

Creative problem solving, is a design process, composed of a series of events, stages, phases or states of energy which must be experienced before adequate solutions can be obtained. Seven are presented next as an attempt to synthesize many different problem solving models.

Accept situation: To state initial intentions to accept the problem as a challenge; to give up our autonomy to the problem and allow the problem to become our process.

Analyze: To get to know about the ins and outs of the problem; to discover what the world of the problem looks like.

Define: Deciding what we believe to be the main issues of the problem; to conceptualize and to clarify our major goals concerning the problem situation.

Ideate: To search out all the ways of possibly getting to the major goals alternatives.

Select: To compare our goals as defined with our possible ways of getting there. Determining the best ways to go.

Implement: To give action or physical form to our selected best ways.

Evaluate: To determine meaning, progress or value as it has been derived from the entire process.

While the paragraphs above are rather informal, we are intending to describe something which has a rather complicated literature referring to the design of change. For instance, the reader will find that similar stages or energy states can be found under such topics as maximizing goals, optimizing objectives, realizing intentions, anticipatory improvement, bridging analysis to synthesis via concept or organizing data into improved reality.

Let's look at the first energy state in the process of design which we have called acceptance. To accept a problem means to assume its responsibilities. In order to do that, the change agent must voluntarily adapt his/her own needs to coincide with the requirements of the problem situation. Deciding on whether or not to accept a problem necessitates looking into one's own abilities and priorities. It makes no sense to have the students say they will accept responsibility (as in the biology class example above) for something for which they have no time, ability or interest (i.e. not relevant). In short, if students find themselves having to manufacture interest over and above a normal self-motivational amount, it is clear that they are not in tune with the problem and that it is not for them to solve at that time. Or, as in a previous chapter ordering the principal to be more innovative may make it impossible to accept the need for change.

Accepting a problem situation takes many different forms; for instance, it may be stating initial objectives, believing in the problem, pledging oneself to take on the problem, or simply recognizing the need or needs that are represented by the problem.

For many, the first encounter with a problem may lead to a desire to ignore or to reject it as a problem. Nevertheless, this acceptance of a problem energy state must become a part of any open system whether the system is an individual or an institution.

Just as there must be a readiness on the part of the change agent to accept a problem as something needing attention, there is also a requirement to design procedures whereby the environment may be readily sensed, data accumulated and presented to those considering change. The task is to develop a system of routine data collection, storage and retrieval that will help those who have responsibilities to be problem solvers to recognize that there is, in fact, a problem worthy of their attention.

Analysis

Analysis is an energy state which will be returned to over and over again during the process of creative problem solving. There will almost always be a need to go back and pick up more information as the problem and its alternative solutions begin to be uncovered. As already noted, a great deal of analysis must be done even in the act of simply accepting a problem; but it is in analysis that the problem solver, perhaps more than in any other energy state, will cautionsly seek out information through questioning and comparison. Analysis is an attempt to relate one thing to other things to determine interrelatedness. In analysis the problem solver attempts to discover interrelations; examine parts in relation to the whole; dissect the problem; decompose the problem; compare the problem with other situations; seriate or sort out the problem; search for insight within the problem; or determine what it is which makes the problem that which it is.

Enough work has been done on analysis that we can be fairly well assured that the problem solver will in some way have to tackle the following basic questions:

Where can information be found?

Who can help me solve this problem?

What has already been tried to solve this problem?

Are there books or references available?

What are my resources and what is required?

What is the total scope or "world" of this problem?

Which limits can I control and which are fixed?

What is allowed and what is ruled out?

Can the rules be changed?

The above questions suggest that analysis is only a process of our logic. This is certainly not so. Analysis requires that we question and compare with our senses as well.

Definition

Defining a problem is a never-ending process of assigning a meaning to a real situation. We are always attempting to define all of the reality which surrounds us. As we begin each problem we have a basic definition for that situation in need of improvement. This definition is what we mean as we attempt to describe it at the level of understanding. We keep working on developing more and more clear definitions as we progress through problem solving. Stating and restating problems seems to be the intellectual task of human life. With each restatement, whether at the beginning, or at its conclusion, we get closer to the truth of this situation. To put it succinctly, a problem well-defined is a problem nearly solved.

The definition becomes the die through which all future decisions regarding the problem will pass. The solution in the end will become a physical translation of this definitive statement. The definition is, therefore,a specification for desired performance; it is a problem statement regarding the intentions for the behavior of things in the end. In short, the definition is a new, more clear design objective and it must be phrased in measurable terms in order to be realized.

Chapters III and IV in this manual will provide many concrete procedures for acceptance, analysis and definition.

Ideation

As used in the context of problem solving, ideas are merely ways to get where we want to go. That's all they are, no more, no less. Contrary to the popular belief and to most of our experience, ideas are really very easy to acquire. By having only a few idea generating methods available, it is possible to manufacture great quantities of ideas or ways to get to where we want to go. By simply knowing where we want to go, we are at once in a position to find many ways to get there. Finding ideas for problems is often stated as:

To find ways and means for reaching goals

To find techniques and procedures for reaching objectives

To discover the alternate routes

To list all of the alternatives

To uncover the possible choises

To become aware of the different paths which might be taken

Chapter III explains how and when to use brainstorming as one method for generating ideas.

Selecting

From the many ways and means that were gathered together in the act of producing ideas now comes an activity in which the critical skill is employed in reducing those alternatives to a few which will be used to proceed with. In some ways, choosing the "best way" is the process of getting more and more specific in the description of the definition. The more clearly that we can state our intentions for the behavior of elements of the situation, the easier it will be to find the right means for filling that bill.

The skills required by problem solvers to make selection of ideas have not been fully explicated, but we do find problem solvers using force-field analyses at this point in their problem solving; we find them screening by personal opinion, we often find them calling on expert opinion (who will often be the practitioner) and sometimes the ideas for utilizing one approach rather than another are simply screened against the objectives that were set out in the problem definition. Chapter IV illustrates how to do force-field analysis in teams.

Implementation

In implementation we swing over from the analytic planning mode of problem solving to the actual doing. Our outcomes now become something which is often physically obvious instead of a simple intellectual product. Implementation usually means putting the plan into effect, taking action on the chosen idea, giving embodiment to the concept, giving form to the idea, optimizing the intentions, achieving the solution, or just plain doing it. Implementation usually takes one of the following forms: acting, arguing, accepting, administering, building, canvassing, cleaning, composing, eating, joining, facilitating, inventing, lecturing, listening, reporting, teaching or just plain testing.

Elaborate methods are available for implementation. There's a whole literature on project management, PERT methods, Gantt charts, production schedules, utilization of temporary task forces, sequencing, and costing. Such methods are essential to the effective problem solver. More often than not, the problem solver will find himself at this stage heading up a task force designed to carry out a specific set of activities by a specific date or set of dates and with a limited budget to do it in. The orderly utilization of the resources the problem solver has available to him is a critical skill at this energy state.

The problem solver is a manager in this phase of problem solving. Every PERT chart, Gantt chart, production schedule, sequence of activities will have due dates; will have people, materials and facilities involved and the manager will be constantly in need of updated information whether they things are on schedule; whether they are being produced properly; whether they are meeting the quality criteria established in the problem definition; whether the process is working.

Chapter VI provides detailed instructions on one method of taking action.

Evaluation

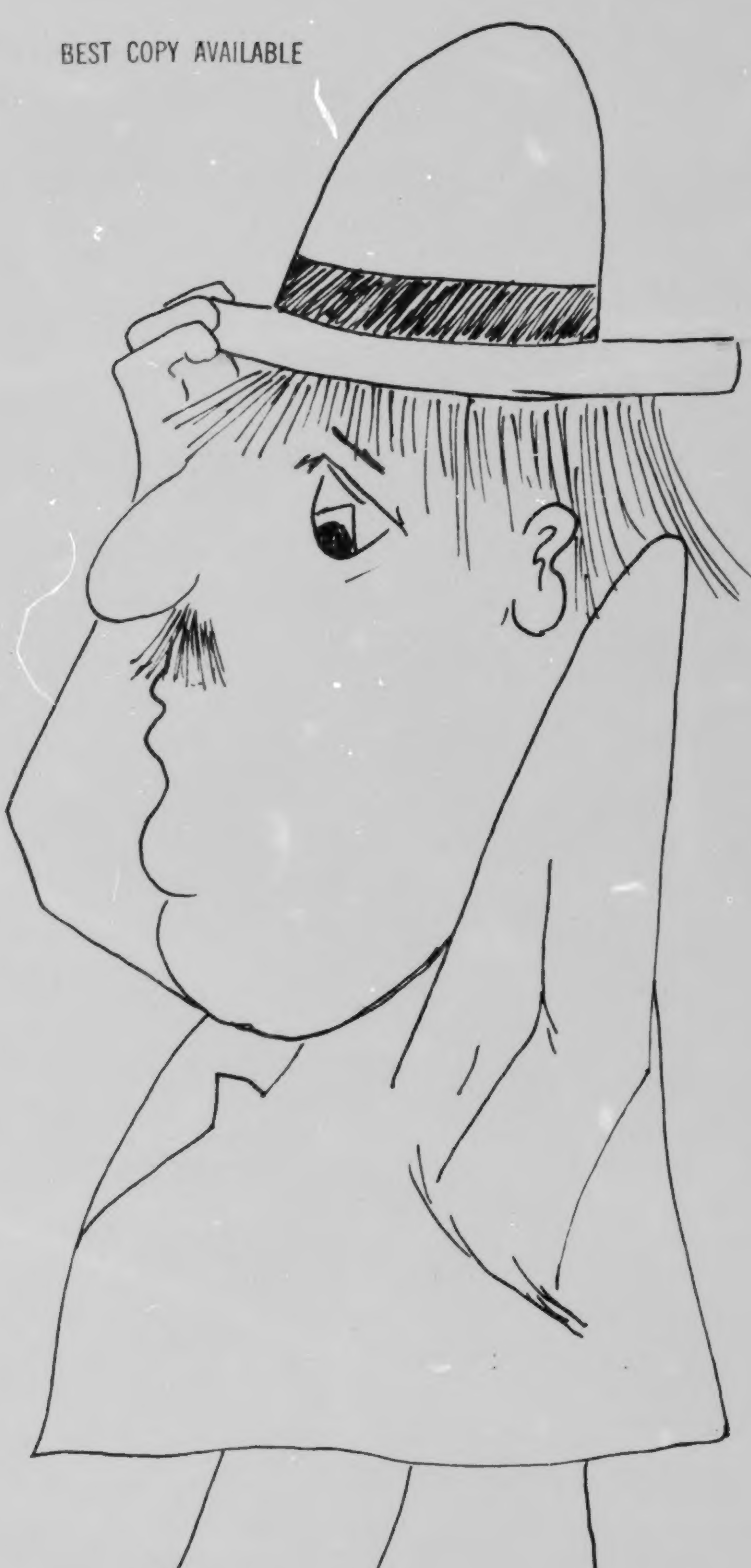
Unfortunately, most problem solving models treat evaluation as the final act of problem solving as the assessment activity which leads to a decision either to recycle or to go on to something else. In this manual evaluation is seen as a continual activity of providing feedback loops to the kinds of decisions needed at any given stage in problem solving. For instance, we talked about the early energy states of accepting the problem of defining the problem, of generating all alternatives. In each of those early energy states there is a need for information; there is a need for taking that information and making decisions about how to proceed on the basis of such information. Anytime such action is taken on the basis of information, it is an act of evaluation. Therefore, rather than being considered a final activity in a logical problem solving process, it really must be considered a first activity and is, therefore, not the last chapter in this manual.

It is in the evaluation process that the objectives which began to take form at the state of the process now become criteria for assessment. There are certain concluding evaluation aspects which result in a comparison of the record of accomplishments against the list of refined hopes and intentions called our objectives. Evaluation in this sense can be thought of as a measurement of how far or how much and how well or how rich the outcomes have been. Looking at questions of how much and how well help to determine how valuable the overall activity has been.

Review

In this chapter what started as a simple failure of a biology teacher to change his class procedures provided an excellent vehicle for noting that change efforts have both a task component (such as learning biology) and a process component (how it felt to work in small lab groups and determining one's own grades).

Having made the distinction between task and process, problem solving was then described as a logical way to develop the task of changing while at the same time managing the process of changing. Subsequent chapters will develop aspects of problem solving in more detail.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CHAPTER III

Finding and Deciding on Our Goals

Every chess player knows that any plan is better than no plan, and that a sound plan is better still. The same can be said of educational change. Decisions and actions must be part of an overall strategy which points in a clear direction at all times. Much of the work done in our schools often seems haphazard -- even mindless -- but as soon as teacher and student behavior becomes goal-directed, energy increases, morale is higher and greater achievement follows.

It has been traditional in education for teachers to carry out the goals given them by higher authorities and for students to carry out the goals given them by their teachers. This manual is based on the belief that people work more effectively if they are striving toward goals that they have formulated for themselves. Consequently, it is important for all who would involve themselves in changing their educational programs to strengthen their goal-setting techniques.

It is, of course, far more difficult for groups to identify and attain goals than it is for individuals. A collective will is much more complex than an individual; therefore, when a group of educators attempts a change, they must spend considerable time together sharing their ideas and experiences and establishing priorities. This chapter suggests a number of procedures that groups can utilize in order to identify their goals. It is not essential that they all be used in all cases; nor is it suggested that these activities be carried out according to any rigid formula. What we are recommending is that as many ideas as possible are heard and considered when a group first starts to set its goals, that the final goals that are established are inclusive rather than exclusive. Goals must be significant rather than trivial; and, above all, they must be feasible.

GOAL SOURCES

This chapter identifies seven sources of ideas for goals. They are:

1. Those being served -- the students.

2. Significant others -- parents, taxpayers, other youth agencies, politicians, etc.
3. Other schools.
4. Policy-practice discrepancies.
5. Predictions about the future.
6. Fantasies.
7. Our own Leadership.

We then suggest a number of activities designed to help you gather ideas from all these sources and to organize these ideas into workable goals. Activities are listed in connection with one goal source each, but need not be limited to that one source. For example, the brainstorming technique described in this chapter can be useful with almost any group.

GOAL SOURCE #1 - Those being served.

What do our students need? Are they bored? Discontent? Do they feel involved enough in their own educational programs? How do they feel about what they are learning? What growth (or lack of growth) do they show? Try the following three search activities:

Goal Search Inquiry #1: What do our student consumers want?

Here are three different inquiry projects which teachers and administrators have found helpful in attempting to get input from the students' point of view to help generate ideas for goals.

Activity #1 - Group interviews with students

In this activity the staff prepares a group interview schedule to inquire from students what changes they would most like to see happen, etc. Here is a sample interview:

Question 1: Thinking of a new group of students in your place a year from now, what would you like to see happening differently from the way it is now so they would feel happier and be learning more? Who would be doing what differently? What would be happening differently?

Question 2: If several of you were on a planning committee with school principals and teachers and school board members to plan to make this school system the best possible one you can imagine, what ideas might you be suggesting about the best possible kind of school?

Procedure

We recommend you interview in pairs, with one acting as recorder and asker of follow up clarification and probe questions, the other asking the questions and being sure everyone has their say.

We suggest groups of 5 - 7, heterogeneous if possible.

Be sure to express the idea that different ideas are expected and valued. Check out and record how many agree with a particular idea.

Many more ideas will be expressed more fully than from individual interviews.

The interviewers should practice the technique once to get past the temptation to insert ideas and evaluative positions.

Activity #2 - Large group brainstorm period

In this inquiry have a large population of students seated around tables of 5 - 8 in a cafeteria or library or in circles of 5 - 8 in a gym or other large space. Each group has 2 or 3 large sheets of newsprint and a majic marker. The brainstorm topic is, "What are all the things you can think of that might be done to make our school a better, more interesting place for learning things?"

Brainstorming - One of the most productive ways of starting a search for ideas is to tap the experience and the creativity of the members of the group who are engaged in the problem solving effort. Rules for brainstorming are:

1. Generate as many ideas as possible in a short period of time.

2. Don't evaluate.

3. Don't elaborate.

4. Be creative (a "far-out" idea may prove to be more feasible than it looks at first or it might stimulate someone else to think of an even better idea!)

5. Don't discuss.

6. Then ask each group to mark their 4 or 5 most important ideas.

7. Post the sheets on the wall with masking tape.

8. Everyone walks around reading and marking the most important ideas they see on any of the sheets.

The most important point to remember about "brainstorming" is that, until the last steps, all comments must be non-evaluative. Most of us have a tendency to react very quickly to suggestions, and the more anxiety the suggestion produces, the quicker we are to react to it. It is important that we restrict our behavior to listening to each other and listing all suggestions on the board. Time will come later for evaluating the various suggestions and for establishing priorities. One teacher, familiar with brainstorming, writes:

> I sometimes think Roberts Rules of Order have done more harm than good. Roberts is good for decision making; it is bad for deliberation or exploration of alternatives. What brainstorming can do is open up groups to creative collaboration as opposed to competitive put-downs. The single greatest drawback in most groups is the insistence on procedures that require the disposition of ideas in the order they are presented. Aside from the frustration under the "debate" category, there is the terrible loss of time that results from the discovery, too late, that a superior idea was required to wait its turn. Brainstorming is the single greatest group helper I could mention, and groups instinctively recognize its value the first time they try it.

Activity #3 - Role reversal experiment

If no students are available for data collection, try an exercise, in which each teacher and administrator temporarily becomes a student they know or would like to try to identify with. Then brainstorm, as students, using the Activity #2 design.

Deriving Goal Ideas From These Inquiries

As you review the data, rank order for yourselves individually what you believe are the 3 or 4 most important goal ideas. Share and discuss reasons why.

Rank #1 goal is:

Rank #2 goal is:

Rank #3 goal is:

Goal Search Inquiry #2: What are "they" expecting, pushing for, hoping for, disapproving of?

The Activity

Make up a list of the significant others who have an interest in what the school teaches, how it educates and should be changed and what should be given priority (don't forget the parents).

Using a chart like the one below, beside each group or person on the list, in the second columd, list phrases describing the type of discontent or concern you believe they express or feel. Then, in the third column, write phrases describing the change you believe would most please this person or group.

You may find you are unclear about your data or have differences of interpretation. You'll need to do some checking.

Significant Others	Type of Concern	What Change Would Please

Your Analysis

You again need to each select the 3 or 4 most important goal ideas, share with others and discuss criteria for choice.

Goal Search Inquiry #3: From the successful goals of other educators

The challenge of this inquiry is to scan the successful educational innovations developed and tested by others and to see which ones most "turn you on" in terms of your criteria.

Activity #1 - The ERIC System

You may want to search for "exemplary schools" or "models" as coded in the Resource Bank, or you may be searching for specific areas of new practices such as student government or social studies or drug education. There are now some good helps on how to use the ERIC system to retrieve the knowledge you are seeking.

Activity #2 - Nominations from experts

Divide up the job of interviewing several respected informants (some of whom may be outside of education) with the question, "What do you think are the most significant improvements in education you are currently aware of?" "What changes do you feel are most needed in education?" "Why?"

Activity #3

Telephone several experts. Make a date for a telephone conversation, offering a small stipend if possible. Use a telephone amplification box (the battery ones cost $10-$15) so a group of you can talk with and record the conversation with your informant. You may want to use the same questions as above.

Your Analysis

Again remember that you need to convert these ideas of others into goal ideas for you. This means rank ordering or prioritizing in some way, with clarification of your own criteria for judgment.

Activity #4 - Other schools

There are numerous experiments in education and many long-established programs which may give you ideas for your own programs. Have individuals or groups visit other schools, observe, ask questions and determine what, if anything, can be used or adapted for use in your school. An alternative is to invite students, teachers and administrators from other schools to come to your school, observe what you are doing, and make suggestions. This sometimes entails expense, for educational consultants often charge a great deal of money for their services. You will discover, however, that almost anyone who is involved with a new program that is doing well will be eager to share his ideas and give generously of his time if he finds you a willing and interested listener.

Goal Search Inquiry #4: Policy-practice discrepancies

What are we doing that we could be doing better? What aren't we doing at all that we should? What are some of the things we should stop doing?

The Activity

Have a team brainstorm on the question: What are the differences between what we are doing and what we think we should be doing? Another way of asking the question is: What conditions prevail that are contrary to what we believe should prevail?

1. Divide a blackboard into two columns headed by "is" and "ought to be". List all ideas that group members can think of.

2. Prioritize your list. Select the three or four discrepancies that seem to be the most important for you. Perhaps other teams have been compiling similar lists. If so, combine your ideas with others and select a few areas to work in.

3. For each item you will deal with, again make two columns. In one, list all the constraints which are hindering you from changing the situation. In the other, list all the factors which you can count on to help you bring about the change.

Example:

is	ought to be
Our students are too grade-conscious	Students should care more about the learning than the grade

Helps	Constraints
natural curiosity of students	students are conditioned to being judged by their teachers
some parents eager to support experiments in non-grading	pressure from parents
some colleges not as interested in grades as formerly	anxieties over college acceptance
goal setting techniques are known which can help our students learn to evaluate themselves	insecure teachers rely on grades to control their students

Once the helps and constraints are identified, concentrate on developing the helps that are available to you. It is useful to try to remove as many constraints as possible; more progress is made, however, by constantly strengthening the helps.

Goal Search Inquiry #5: Predictions of the future

Activity

Review some of the current statements of predictions about the shape of things to come. The World Future Society, P. O. Box 30369, Bethesda Branch, Washington, D. C. 20014 has bibliographies and several educational groups and business groups have published their "studies of the future."

From the searches of your team members, select several trends you feel are important, e.g., the trend toward equalization of influence between the generations; the trend toward education as a continuous process through the life cycle; the trend of occupational shift toward people-service occupations.

For each trend statement, have the team make as many "implications for our educational goals" statements as they can. The position to take is, "If this prediction of a trend is correct -- what implications for educational goals can we project -- goals that might support adaptation to the trend or creative struggle against and independence from the trend."

For an excellent illustration of how to use the future as a source of learning, see Alvin Toffler's book, Learning for Tomorrow, published by Vintage books in 1974.

Goal Search Inquiry #6: Our own images of better education

This is quite a different goal search position than the one of thinking from the predictions of the future made by others. This is your own projecting into the future as you would like to see it come to pass.

Activity

Each team member works alone with a felt tip pen on a small piece of newsprint that can be put up for reading.

Each member projects him or herself ahead -- one or two years -- into the future. You are on a flying carpet looking down on your school or school system at that time and making observations -- writing them down as they are happening -- of what you see and hear going on that pleases you as a sign of progress since a year or two ago. The observations must be concrete images of teacher-student interaction, student relations, teaching activities, teacher-administrator interactions, etc.

After about 15-20 minutes of quiet individual work time, everyone posts their images and during the reading period everyone checks the 3 or 4 images they find most exciting.

Goal Search Inquiry #7: Has the administration done some planning?

Often planning has been done and gone into the files or been shared by only a few. If planning has been done, the ideas need to be unearthed and used as a seventh source of goal ideas.

Putting These Goal Search Efforts Together

If you have carried through all or most of these goal search activities, you are now ready to plan wisely for your children, your colleagues and your educational community.

Have the goal ideas from the different sources been very different or, more often, similar? What clues do you have about understanding the goal priorities of others?

Now that you have your data from yourselves and other available, we recommend that again each of you select what seems to you to be 3 or 4 feasible top priority goals -- then compare your preferences and discuss the criteria for selection of priorities.

Perhaps you've identified some team goals and some personal goals, some goals for the school you want to get behind as a group, some goals you'd like to experiment with within your team and other ideas that someone wants to try with support and encouragement from others. In the next two sections, you will find some important helps in doing effective planning to achieve your goals.

CHAPTER IV

Team Building

Let us review. So far this manual has been introduced to you, a basic review of planned change has been completed and Chapter III should have helped with the initial formulation of your goals. The primary focus of this chapter is on building a team for the change effort. However, it is also recognized that you may have decided to begin with this chapter which should present no problems.

The specific objectives of this chapter are to introduce you to ideas, exercises and methods for analyzing team functioning. In addition, the tool of Force Field Analysis (FFA) is introduced for use in this and later chapters.

A Rational for Teams

There are some facts about groups that have led us to encourage you to form a team to plan and implement your change effort. Some of these facts are recounted below. If you wish to know more about each fact, refer to the study cited.

1. Those who are highly attracted to the group more often take on responsibility . . . (Larson 1953) For instance, they participate more readily in meetings, persist longer in working toward difficult goals and remain members longer . . .

2. Highly organized, cohesive groups involved in tasks designed to produce frustration and failure while showing intense aggression toward each other, did, nevertheless, resist disruption in contrast to less highly organized groups (French 1956)

3. Groups that are highly cohesive have members who influence each other more readily than low cohesive groups (Back 1951)

4. Highly cohesive groups report a greater tendency to reject the deviant (Berkowitz 1964)

5. The members of a highly cohesive group, in contrast to one with a low level of cohesiveness, are more concerned with their membership and are, therefore, strongly motivated to contribute to the group's welfare (Kelly and Thibaut 1969)

6. In research comparing three decision making techniques; i.e., (a) decisions by individuals and/or a minority faction of the group, (b) decisions based on the support of a majority and (c) decisions based on equal support of each member; data show that the latter (c) type decisions tend to be better even though they usually take longer to make (Kelly and Thibaut 1969)

7. Groups solve problems best when they plan their procedures (Shure 1962)

Team Composition

First let's look at some criteria you will want to apply to the composition of your team. In terms of size, most studies show that committees of six to nine members tend to volunteer more communication with each other and solve problems better.

Achieving the right balance of diversity on a team is difficult. On the one hand, having differing viewpoints often leads to creative solutions to problems; on the other hand, if the team is too diverse, it may be impossible to coordinate different interests.

Both in terms of size and diversity, team composition should insure that there is enough difference to insure some members will initiate on the task and others will provide harmonizing or social support roles.

Most teams benefit by having someone who will act as a convener and some one else who will keep a team history.

One other option you may wish to exercise in building a team is to think of having a small cadre of people who attend all meetings and then a larger contingent which attends only those meetings which deal with their specific interests. From time to time, it is also important to invite those you anticipate will oppose you, in order to gain insight from alternative viewpoints.

Now let's check on how adequate you believe the composition of your team to be. Indicate your response by placing a check mark next to the rating of your choice.

_____ 9. Completely adequate: the people on this team represent an appropriate mix.

_____ 8. Almost completely adequate.

_____ 7. Quite adequate.

_____ 6. Moderately adequate.

_____ 5. About as adequate as inadequate: Some of the people on this team represent the right mix of expertise; others are not very knowledgeable or useful.

_____ 4. Moderately inadequate.

_____ 3. Quite inadequate.

_____ 2. Almost completely inadequate.

_____ 1. Completely inadequate: The people on this team are not knowledgeable or committed to our change effort.

Summarize your team ratings on the following form without using names.

COMPOSITION SUMMARY

# of 9's _____	# of 5's _____
# of 8's _____	# of 4's _____
# of 7's _____	# of 3's _____
# of 6's _____	# of 2's _____
# of 1's _____	

If your ratings of composition are below 7, you will need to restructure your team. You will want to discuss such questions as, "Do we need to add members to improve our mix?" "Are there some people we would rather not have on this team?" "If so, why?" "If we modified our goals to accommodate some of those who do not feel "at home" on this team, would our composition be better?" "Are there any of us who simply are not clear about why we are on this team?"

You may find the above questions difficult to discuss. If so, go directly to the communication section of this chapter and practice the three skill exercises described. This practice should facilitate discussion of the above questions and thus the restructure of your team.

As you move through your change effort, your membership needs may change, so be sure to use this section on team composition periodically.

Team Procedures

There is probably no single time waster as great as trying to run a team meeting with inappropriate or inadequate procedures. Often teams assume that Roberts rules of order should prevail. Below we will suggest some alternatives. The important thing is to gain agreement as to which procedures seem to work best for your team.

Begin by formulating an agenda before your meeting is to begin. (If worse comes to worse, even a half an hour before is helpful.) To facilitate agenda building, give each member forms for transmitting items they wish to have considered. (Figure 1 gives an example.)

Usually a cut off date is set for getting agenda items to the Chairman. At the cut off time the Chairman and/or the steering committee arrange and schedule the items (see Agenda Format, Figure 2 below), leaving time for emergency items. The agenda items are presented in Figure 1.

Figure 1

AGENDA ITEMS

1. Initiator's Name ______________________________ Date ________

   Initiator's Phone ____________________

2. If it is appropriate, define the problem underlying this agenda item. (Remember problem definitions point to discrepancies between a) what is and what ought to be and b) what is expected and what is observed, etc.)

   ____

   ____

3. Which of the following applies to this item:

   _____ Reports: For information only - progress

   _____ For exploratory discussion but not for decision

   _____ Requesting the group to make a decision

   _____ Requesting the group to ratify a decision made elsewhere

   _____ Other, explain ____________________________________

4. What is the agenda item? ______________________________

   ____

5. How much time is needed? ______________________________

   Return this form to ____________________________________

   ____

With this kind of format the Chairman and the steering committee have many options for ordering the agenda. For instance, they may want to put all the information reporting and status reporting items at the beginning or end or disperse them among decision items. They can allocate fairly tight time lines for reporting and discussion items. Also, they may need to contact the initiator for further information or they may recommend that the item proposed needs further work at a sub-committee level before it is presented to the total group.

Finally the agenda items should appear in writing visible to the entire group (either on newsprint or typed copies). The format for this presentation appears in Figure 2.

At the beginning of the meeting, the agenda format is reviewed and modified if necessary.

AGENDA FORMAT

TIME	INITIATOR	ITEM	PROBLEM	ACTION REQUIRED
12-12:10	Chairman	Agenda Review	-Is it accurate -Are all problems included	Decision to add or delete
	(Emergency items may be added here; if so, times will be delayed)			
12:10-1:00	John Henry	Objectives	-Priorities are not being set -Statements are not behavioral	Ratify sub-committee's recommendations
1-1:15	Jim Atkins	Organization Structure	-To formulate an organization structure which promotes flexibility	Progress report
1:15-1:30	Charles Sauba	Budget	-Do not have forms needed to complete budget priorities	Reminder and urging
1:30-2:20	Joe Rich	Evaluator	-Need to receive information relevant to implementation of current evaluation study (see attached for full explanation)	-Discussion -Need decisions on categories of information
2:20-2:30	Steering Committee Member	Own Evaluation	-Need data as to our progress	-Members fill out questionnaire

Figure 2

Communication

Nothing facilitates team work as much as a communication pattern which is characterized by open, authentic interaction. A danger of cohesiveness in teams is that the pressures to conform to majority opinion is very high. Indeed, it is higher than in a group in which cohesiveness is not as high. The only way to have a highly cohesive team and open expression of different opinions is to constantly monitor how well you are communicating. Also, make it explicit that differences are to be valued, not repressed!

How adequate would you rate the communication of your team at this point in time? Indicate your response by placing a check mark on the rating of your choice.

_____ 9. Completely adequate: Our interaction is characterized by open and authentic expression of difference and by support and respect for each other.

_____ 8. Almost completely adequate.

_____ 7. Quite adequate.

_____ 6. Moderately adequate.

_____ 5. About as adequate as inadequate. We do manage to communicate with one another but not because we intentionally foster openness and authenticity.

_____ 4. Moderately inadequate.

_____ 3. Quite inadequate.

_____ 2. Almost completely inadequate.

_____ 1. Completely inadequate: This team is closed. Either you agree with the majority or feel rejected.

Use the following form to summarize your responses.

COMPOSITION SUMMARY

# of 9's _____

# of 8's _____

# of 7's _____

# of 6's _____

# of 5's _____

# of 4's _____

# of 3's _____

# of 2's _____

# of 1's _____

If your ability to communicate as a team is lower than a majority of 7, use the following exercises. We are indebted to John Wallen of the Northwest Regional Educational Laboratory for these exercises.

COMMUNICATION EXERCISE A

PARAPHRASE: A Basic Communication Skill for Improving Team Interpersonal Relations

The problem: Tell somebody your phone number and he will usually repeat it to make sure he heard it correctly. However, if you make a complicated statement, most people will express agreement or disagreement without trying to insure that they are responding to what you intended. Most people seem to assume that what they understand from a statement is what the other intended.

How do you check to make sure that you understand another person's ideas, information, or suggestions as he intended them? How do you know that his remark means the same to you as it does to him?

Of course, you can get the other person to clarify his remark by asking, "What do you mean?" or "Tell me more." or by saying, "I don't understand." However, after he has elaborated you still face the same question, "Am I understanding his ideas as he intended it to be understood?" Your feeling of certainty is no evidence that you do, in fact, understand.

The skill: If you state in your own way what his remark conveys to you, the other can begin to determine whether his message is coming through as he intended. Then, if he thinks you misunderstand, he can speak directly to the specific misunderstanding you have revealed. I will use the term "paraphrase" for any means of showing the other person what his idea or suggestion means to you.

Paraphrasing, then, is any way of revealing your understanding of the other person's comment in order to test your understanding.

An additional benefit of paraphrasing is that it lets the other know that you are interested in him. It is evidence that you do want to understand what he means.

If you can satisfy the other that you really do understand his point, he will probably be more willing to attempt to understand your views.

Paraphrasing, thus, is crucial in attempting to bridge the interpersonal gap. (1) It increases the accuracy of communication, and thus the degree of mutual or shared understanding. (2) The act of paraphrasing itself conveys feeling - your interest in the other, your concern to see how he views things.

Learning to paraphrase: People sometimes think of paraphrasing as merely putting the other person's ideas in another way. They try to say the same thing with different words. Such word swapping may merely result in the illusion of mutual understanding as in the following example:

Sarah: Jim should never have become a teacher.
Fred: You mean teaching isn't the right job for him?

Instead of trying to reword Sarah's statement, Fred might have asked himself, "What does Sarah's statement mean to me?" In that case the interchange might have sounded like this:

Sarah: Jim should never have become a teacher.
Fred: You mean he is too harsh on the children? Maybe even cruel?
Sarah: Oh, no. I meant that he has such expensive tastes that he can't ever earn enough as a teacher.
Fred: Oh, I see. You think he should have gone into a field that would have insured him a higher standard of living.
Sarah: Exactly! Teaching is not the right job for Jim.

Effective paraphrasing is not a trick or a verbal gimmick. It comes from an attitude, a desire to know what the other means. And to satisfy this desire you reveal the meaning his comment had for you so that the other can check whether it matches the meaning he intended to convey.

If the other's statement was general, it may convey something specific to you.

Larry: I think this is a very poor textbook.
You: Poor? You mean it has too many inaccuracies?
Larry: No, the text is accurate, but the book comes apart too easily.

Possibly the other's comment suggests an example to you.

Laura: This text has too many omissions; we shouldn't adopt it.
You: Do you mean, for example, that it contains nothing about the Negro's role in the development of America?
Laura: Yes, that's one example. It also lacks any discussion of the development of the arts in America.

If the speaker's comment was very specific, it may convey a more general idea to you.

Ralph: Do you have 25 pencils I can borrow for my class?
You: Do you just want something for them to write with? I have about 15 ball point pens and 10 or 11 pencils.
Ralph: Great. Anything that will write will do.

Sometimes the other's idea will suggest its inverse or opposite to you.

Stanley: I think the Teacher's Union acts so irresponsibly because the Administration has ignored them so long.
You: Do you mean that the T. U. would be less militant now if the Administration had consulted with them in the past?
Stanley: Certainly. I think the T. U. is being forced to more and more desperate measures.

To develop your skill in understanding others, try different ways of (1) conveying your interest in understanding what they mean, and (2) revealing what the other's statements mean to you. Find out what kinds of responses are helpful ways of paraphrasing for you.

The next time someone is angry with you or is criticizing you, try to paraphrase until you can demonstrate that you understand what he is trying to convey as he intends it. What effect does this have on your feelings and on his?

COMMUNICATION EXERCISE B

BEHAVIOR DESCRIPTION: A Basic Communication Skill for Improving Team Interpersonal Relationships

The problem: If you and another person are to discuss the way you work together or what is happening in your relationship, both of you must be able to talk about what each of you does that affects the other. This is not easy. Most of us have trouble describing another's behavior clearly enough that he can understand what actions of his we have in mind.

Instead of describing the other person's behavior we usually discuss his attitudes, his motivations, his traits and personality characteristics. Often our statements are more expressive of the way we feel about the other's actions than they are informing about his behavior. And yet we may be unaware of our feelings at the time.

Let's suppose you tell me that I am rude (a trait) or that I don't care about your opinion (my motivation). Because I am not trying to be rude and because I feel that I do care about your opinion, I don't understand what you are trying to communicate. We certainly have not moved closer to a shared understanding. However, if you point out that several times in the past few minutes I have interrupted you and have overridden you before you could finish what you were saying, I receive a clearer picture of what actions of mine were affecting you.

The skill: Behavior description means reporting specific, observable actions of others (1) without placing a value on them as right or wrong, bad or good and (2) without making accusations or generalizations about the other's motives, attitudes or personality traits.

You try to let others know what behavior you are responding to be describing it clearly enough and specifically enough that others know what you observed. To do this you must describe visible evidence, actions that are open to anybody's observations. Sometimes, for practice, it is helpful to try beginning your description with "I see that . . ." or "I noticed that . . ." or "I heard you say . . ." to remind yourself that you are trying to describe specific actions.

Examples: "Jim, you've talked more than others on this topic. Several times you cut others off before they had finished."

NOT: "Jim, you're too rude!" which names a trait and gives no evidence.

NOT: "Jim, you always want to hog the center of attention!" which imputes an undesirable motive or intention.

"Bob, you've taken the opposite of nearly everything Harry has suggested today."

NOT: "Bob, you're just trying to show Harry up." which is an accusation of undesirable motivation.

NOT: "Bob, you're being stubborn." which is name calling.

"Sam, you cut in before I had finished."

NOT: "Sam, you deliberately didn't let me finish." The word "deliberately" implies that Sam knowingly and intentionally cut you off. All that anybody can observe is that he did cut in before you had finished.

Several members of the group had told Ben that he was too arrogant. Ben was confused and puzzled by this judgment. He was confused because he didn't know what to do about it; he didn't know what it referred to. He was puzzled because he didn't feel arrogant or scornful of the others. In face, he admitted that he really felt nervous and unsure of himself.

Finally, Joe commented that Ben often laughed explosively after someone made a comment that seemed to have no humorous aspects. Ben said he had been unaware of this. Others immediately recognized that this was the behavior that made them perceive Ben as looking down on them and, therefore, arrogant. The pattern, thus, was as follows. When someone made a statement of which he was somewhat unsure, Ben felt insecure. Ben's feelings of insecurity expressed themselves in an explosive laugh. The other person perceived Ben as laughing at him; the other person felt put down and humiliated; the other expressed his feeling of humiliation by calling Ben arrogant. Note that Ben had no awareness of his own behavior, which was being misread until Joe accurately described what Ben was doing. Ben could then see that his laugh was a way of attempting to cope with his own feelings of insecurity.

To develop skill in describing behavior you must sharpen your observations of what actually did occur. You must force yourself to pay attention to what is observable and to hold inferences in abeyance. As you practice this you may find that many of your conclusions about others are based less or observable evidence than on your own feelings of affection, insecurity, irritation, jealousy or fear. For example, accusations that attribute undesirable motives to another are usually expressions of the speaker's negative feelings toward the other and not descriptions at all.

COMMUNICATION EXERCISE C

DESCRIPTION OF FEELINGS: A Basic Communication Skill for Improving Interpersonal Relationships

The problem: To communicate your own feelings accurately or to understand those of others is difficult.

First, expressions of emotion take many different forms. Feelings can express themselves in bodily changes, in action and in words. (See diagram.)

Second, any specific expression of feeling may come from very different feelings. A blush, for example, may indicate that the person is feeling pleased, but it may also indicate that he feels annoyed, or embarrassed or uneasy.

Likewise, a specific feeling does not always get expressed in the same way. For example, a child's feeling of affection for his teacher may lead him to blush when she stands near his desk, to touch her as he passes her, to watch her as she walks around the room, to tell her "You're nice," to bring his pet turtle to show her, etc., -- different forms of expression for the child's feeling of affection.

Communication of feelings, thus, is often inaccurate or even misleading. What looks like an expression of anger, for example, often turns out to result from hurt feelings or from fear.

A further obstacle to the accurate communication of feelings is that your perception of what another is feeling is based on so many different kinds of information. When somebody speaks, you notice more than just the words he says. You note his gestures, voice tone, posture, facial expression, etc. In addition, you are aware of the immediate present situation -- the context in which the interaction is occurring. You are aware of whether somebody is watching, for example. And so you make assumptions about how the situation influences what the other is feeling. Beyond all of this you also have expectations based on your past experiences with the other.

You make inferences from all of this information -- his words, nonverbal cues, the situational context, your expectations of the other. These inferences are influenced by your own current emotional state. What you perceive the other to be feeling, then, often depends more upon what you are feeling (e.g., to be afraid of or wishing for) than upon the other person's actions or words. For example, if you are feeling guilty about something, you may perceive others as angry with you. If you are feeling depressed and discouraged about yourself, others may seem to be expressing disapproval of you.

And so -- communicating your own and understanding the feelings of others is an extremely difficult task. And yet, if you wish others to respond to you as a person, you must help them understand how you feel. Likewise, if you are concerned about the other as a person and about your relationship with him, you must try to understand his emotional reactions.

The skill: Although we usually try to describe our ideas clearly and accurately, we often do not try to describe our feelings clearly. Feelings get expressed in many different ways, but we do not usually attempt to identify the feeling itself.

One way to describe a feeling is to identify or name it. "I feel angry." "I feel embarrassed." "I feel comfortable with you." However, we do not have enough names or labels to encompass the broad range of human emotions, and so we invent other ways to describe our feelings, such as the use of similes. "I feel like a tiny frog in a huge pond." A girl, whose friendly overture had just been rebuffed, said, "I feel like I have just had an arm amputated."

A third way to describe a feeling is to report what kind of action the feeling urges you to do. "I feel like hugging and hugging you." "I'd like to slap you." "I wish I could walk off and leave you."

In addition, many figures of speech serve as descriptions of feeling. "I just swallowed a bushel of spring sunshine."

Describing your own feelings: You try to make clear what feelings you are experiencing by identifying them. The statement must (1) refer to "I", "me", or "my", and (2) specify some kind of feeling by name, simile, action urge, or other figure of speech.

The following examples show the relation between two kinds of expressions of feeling: (1) those that describe what the speaker is feeling, and (2) those that do not. Notice that expressions of feeling which describe the speaker's emotional state are more precise, less capable of misinterpretation, and, thus, convey more accurately what feelings are affecting the speaker.

Expressing feeling by describing your emotional state	Expressing feeling without describing your emotional state
"I feel embarrassed." "I feel pleased." "I feel annoyed."	Blushing and saying nothing.
"I feel angry." "I'm worried about this." "I feel hurt by what you said."	Suddenly becoming silent in the midst of a conversation.

"I enjoy her sense of humor." "I respect her abilities and competence." "I love her but I feel I shouldn't say so."	"She's a wonderful person."
"I hurt too much to hear any more." "I feel angry at myself." "I'm angry with you."	"Shut up!!!"

Because emotional states express themselves simultaneously in words, in actions and in physiological changes, a person may convey contradictory messages about what he is feeling. For example, his actions (a smile or laugh) may contradict his words (that he is angry). The clearest emotional communication occurs when the speaker's description of what he is feeling matches and, thus, amplifies what is being conveyed by his actions and other nonverbal expressions of feelings.

The aim in describing your own feelings is to start a dialogue that will improve your relationship with the other. After all, others need to know how you feel if they are to take your feelings into account. Negative feelings are indicator signals that something may be going wrong in a relationship with another person. To ignore negative feelings is like ignoring a warning light that indicates that an electrical circuit is overloaded. Negative feelings are a signal that the two of you need to check for misunderstanding and faulty communication.

After discussing how each of you sees the situation or your relationship, you may discover that your feelings resulted from false perceptions of the situation and of his motives. In this case, your feelings would probably change. However, the other may discover that his actions are arousing feelings in you that he wasn't aware of -- feelings that others beside you might experience in response to his behavior -- and he may change.

In short, describing your feelings should not be an effort to coerce the other into changing so that you won't feel as you do. Rather you report your inner state as just one more piece of information that is necessary if the two of you are to understand and improve your relationship.

Perception check: You describe what you perceive to be the other's inner state in order to check whether you do understand what he feels. That is, you test to see whether you have decoded his expressions of feeling accurately. You transform his expressions of feeling into a tentative description of his feeling. A good perception check conveys this message, "I want to understand your feeling -- is this (making a description of his feelings) the way you feel?"

Examples:

> "I get the impression you are angry with me. Are you?"
>
> (NOT: 'Why are you so angry with me?" This is mind reading, not perception checking.)
>
> "Am I right that you feel disappointed that nobody commented on your suggestion?"
>
> "I'm not sure whether your expression means that my comment hurt your feelings, irritated you or confused you."

Note that a perception check (1) describes the other's feelings, and (2) does not express disapproval or approval. It merely conveys, "This is how I understand your feelings. Am I accurate?"

Use of Resources

Another aspect we shall consider under team building is, "How can we insure that we are using all our member resources and the resources of others?" Resource, in this context, means any idea, practice or skill which is needed for effective functioning.

In order to examine your team's utilization of resources, we are going to suggest that you use a tool known as Force Field Analysis to determine how well you are doing at using resources. However, Force Field Analysis can be used at many different stages of problem solving and you will find it suggested throughout this manual.

Force Field Analysis

Form physics, there is the concept that the body is at rest when the sum of all the forces operating upon it is balanced. Or, as with a satellite, it will move through a prescribed orbit when the forces of earth's gravity, moon's gravity, centrifigul force and velocity are balanced to produce that unique orbit. In social behavior, 'an analogous situation may be the percentage of seniors going on to college from a school system. The level stays reasonably constant from year to year because the forces tending to raise the level are just counteracted by forced tending to lower the level.

Among the forces tending to raise the level of college entrance might be:

1) pressures from parents for their children to go on to college

2) the student's feeling that it is "the thing to do" in this school system

3) adequate income to handle college expenses

These forces, and any like them, will be called INCREASING FORCES.

Among the forces that tend to lower the level of college entrance (which will be called DECREASING FORCES) might be:

4) lack of student interest in continuing education

5) ineffectiveness of some aspects of college preparatory curriculum

6) availability of interesting jobs for high school graduates

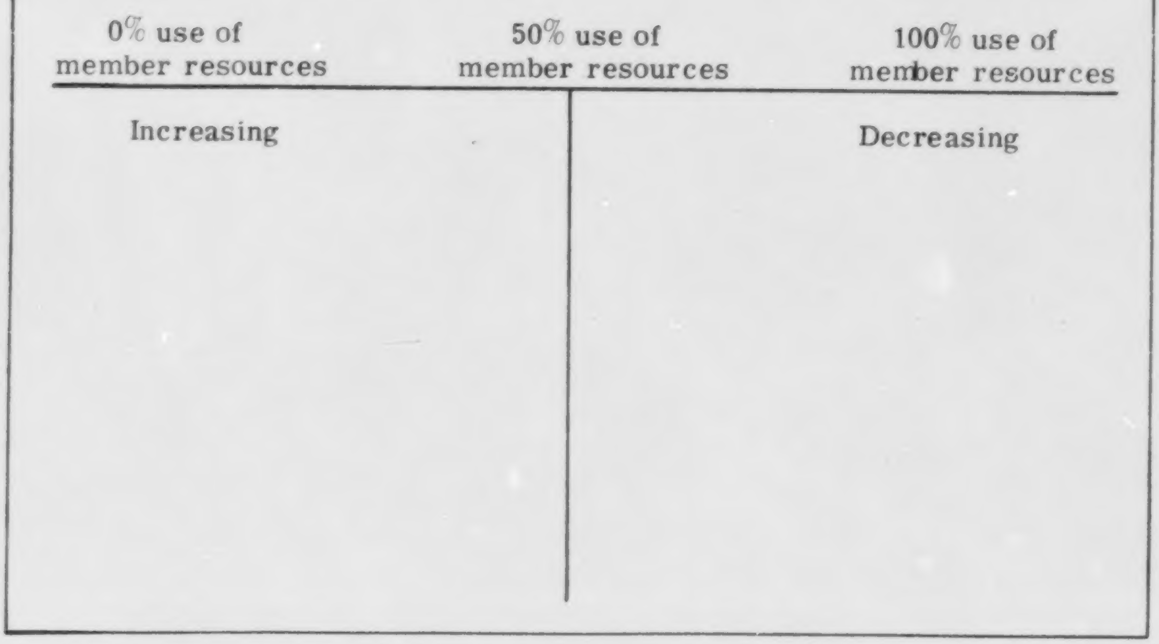
The purpose of using a Force Field Analysis in a social situation is twofold. It forces us to do a more thorough job of analysis and it suggests where to begin in order to change things. When we ask, why are we not using our own resources fully, we may be tempted to suggest reasons which first come to mind. Force Field Analysis will push us to consider all reasons and will also ensure that we know whether the reasons are trivial or significant. Finally, experience has shown that when we wish to change the current balance of forces, if we can find some way to remove or neutralize those forces which decrease our use of resources rather than adding new forces to the increasing aide, change occurs more rapidly.

Returning to the question of how well your team is doing on the use of its member resources, let's build a force field analysis together. We will begin with the assumption that you have estimated that at present you are only using about 50% of your member's resources. It is not important to be precise in this estimate because by selecting 50% you have simply guessed that the forces for increasing and for decreasing the use of member resources have balanced out at 50. If it were 90%, you might be satisfied and not concern yourself with improving. Most likely, it will not be 90.

This force field activity proceeds very well if you do it as a team. So, you may want to draw the following figures on a big sheet of newsprint. Remember, a force field analysis is simply a procedure for listing and then weighing all the forces, both for and against, that have led to present status quo.

Step 1 Draw the force field to be filled in as follows:

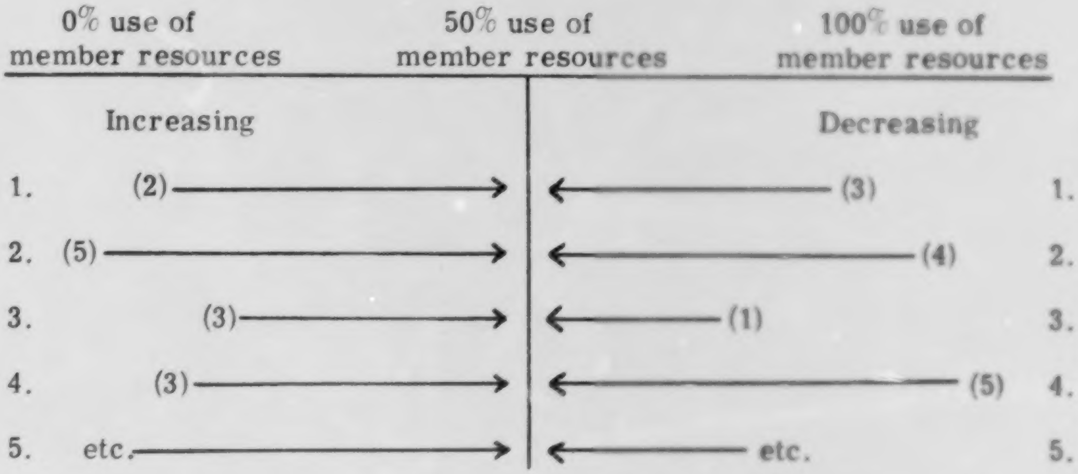
Figure 3


0% use of member resources
50% use of member resources
100% use of member resources
Increasing
Decreasing

Step 2 List the forces each side (space is provided in Figure 4 for you to fill in force field).

Step 3 The next task is to weigh each force. Remember in this step it is important to decide just how strong each force is. Taking just the arrows as you had forces in Figure 4. Note that the sum of the forces must balance out.

Figure 5


0% use of member resources
50% use of member resources
100% use of member resources
Increasing
Decreasing
1. (2)
2. (5)
3. (3)
4. (3)
5. etc.
(3) 1.
(4) 2.
(1) 3.
(5) 4.
etc. 5.

You are now ready to increase your member resource utilization. The best way to begin is by trying to remove those forces which are currently seen as decreasing your resource use. In a few weeks after you have had a chance to practice removing decreasing forces, create a new force field and see if you have moved the balance in the right direction. Routine use of the force field technique on any of the aspects discussed above; i.e., composition, communication, procedures, resources, makes an excellent way of diagnosing how well your team is doing over time.

Leadership

No discussion of team functioning would be complete without reviewing the roles of leadership in a team. If you would like to do some in depth reading on the research related to leadership, you might check the references at the end of this chapter. A review of

0% use of member resources 50% use of member resources 90% use of member res

	Increasing	Decreasing	
1.	Skill exercies on improving our communication →	← Lack of time for socializing	1.
2.	Knowing each other for ____ years →	← Embarrassment in talking about what we do well	2.
3.			3.
4.			4.
5.			5.
6.			6.
7.			7.
8.			8.
9.			9.
10.			10.
11.			11.
12.			12.
13.			13.
14.			14.
15.			15.

Figure 4

the literature and our own experience of working with leaders tells us that a leader is a person or persons who help(s) to achieve group goals and help(s) to provide rewarding interpersonal relations in exchange for status, esteem and greater influence. That is, a leader gives something and he/she gets something. And what he/she gets needs to be approved of by followers. Under this view, leadership is not something with which one is born. It is not a fixed trait. Rather, it changes, grows or dissolves as the needs of the team and the task change. Therefore, many different persons can be expected to be leaders over the life of a team change project.

The two scales below will give you a way of checking how well the current leader is doing in the view of the rest of the team. Two scales are used in order to relate to two major functions to which leadership needs to attend; namely, the task function and the interpersonal function. You may use these scales with the person who has been acting as leader for the change project or you may find that two different persons function as leaders; one on the task and one on the interpersonal side. Or, you may wish to fill these scales out on how well each member does on the task and interpersonal dimensions.

Again, we would recommend you summarize the ratings and discuss the implications. For an in depth treatment of how to improve leadership, see especially Beck, A. C. and Hillmar, E., A Practical Approach to Organization Development Through Management by Objectives -- selected readings. Reading, Mass: Addison-Wesley. 1972.

Task Accomplishment

_____ 9. Completely effective: He works to insure that initiation is taken to achieve goals and objectives; to establish program work flow; to schedule work activities; to develop the budget and to set standards against which effectiveness is judged and evaluated.

_____ 8. Almost completely effective.

_____ 7. Quite effective.

_____ 6. Moderately effective.

_____ 5. As effective as ineffective: Specific and concrete goals and objectives are not established although he has a sense of where we are going; programming and scheduling are sometimes done but not often followed closely; and standards exist only in the most general sense.

_____ 4. Moderately ineffective.

_____ 3. Quite ineffective.

_____ 2. Almost completely ineffective.

_____ 1. Completely ineffective: There is no visible effort to set and achieve concrete goals and objectives, programming and scheduling are never done; sometimes standards are set but ignored. Individual performance is not thought of in terms of goals and objectives.

Interpersonal Competence

_____ 9. Completely competent: He regularly gives and receives non-evaluative, descriptive feedback; he owns up and helps others own up to their values, attitudes, ideas and feelings; he is also open to new values, attitudes, ideas and feelings.

_____ 8. Almost completely competent.

_____ 7. Quite competent.

_____ 6. Moderately competent.

_____ 5. About as competent as incompetent: He tends to give and receive only positive feedback (unless upset); he tends to discourage risk taking and the expression of values, ideas, beliefs and feelings, although he does show some concern for his subordinates as persons.

_____ 4. Moderately incompetent.

_____ 3. Quite incompetent.

_____ 2. Almost completely incompetent.

_____ 1. Completely incompetent: He restricts all expression of feedback; he tends to suppress all expression of feelings, ideas, attitudes and values; he is a "stick to the well-known" no risk, non-experimenter when it comes to relating to others.

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In discussing why you chose the particular ratings you did with the leader, you will be very much helped if you use the behavior description skills learned earlier as an exercise in communicating.

Team Reactions

As a final method of checking on your progress as a team, you may find the following scale useful if you administer it at the end of each of your team meetings. It is useful practice to summarize such ratings and include a discussion of them at the beginning of the next meeting. When summarizing, use both the ratings and the open end comments. When the ratings or the comments begin to drop below an acceptable level for your team, go back to the more specific aspects described above to find out what the sources of dissatisfaction are.

Team Reaction Form

Rate the productiveness, all things considered, of this session for you. Place a circle around the number selected.

1. Absolutely of no value; was not productive at all.
2. Almost completely of no value.
3. Passable.
4. Of some value, but less than average.
5. About average.
6. Somewhat valuable; better than average.
7. Quite valuable.
8. Very valuable; productivity almost at maximum.
9. Extremely valuable; productivity at maximum.

Today's Date ________

Comments, criticisms, questions: ______________________________

____

____

____

Summary

This chapter has introduced you to procedures to use in analyzing and improving your team. Specifically, team building has been discussed in terms of composition, procedures, communication, use of resources and leadership. Periodic use of such processes should improve your effectiveness and make work more rewarding.

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CHAPTER V

Information Management

(Evaluation)

The raw material of evaluation is information. Identifying what information is needed, planning for its collection, and properly interpreting and disseminating it are the basic tasks of information management. The effective management of information is so vital to educational change that an entire separate model in this School Personnel Utilization Project has been devoted to its development. The module on evaluation was developed by the American Institutes for Research (AIR) and it contains subsections on:

(1) Formulating a general evaluation approach
(2) Specifying Product (task) and Process objectives
(3) Measuring outcomes
(4) Analyzing and synthesizing data
(5) Using and reporting results.

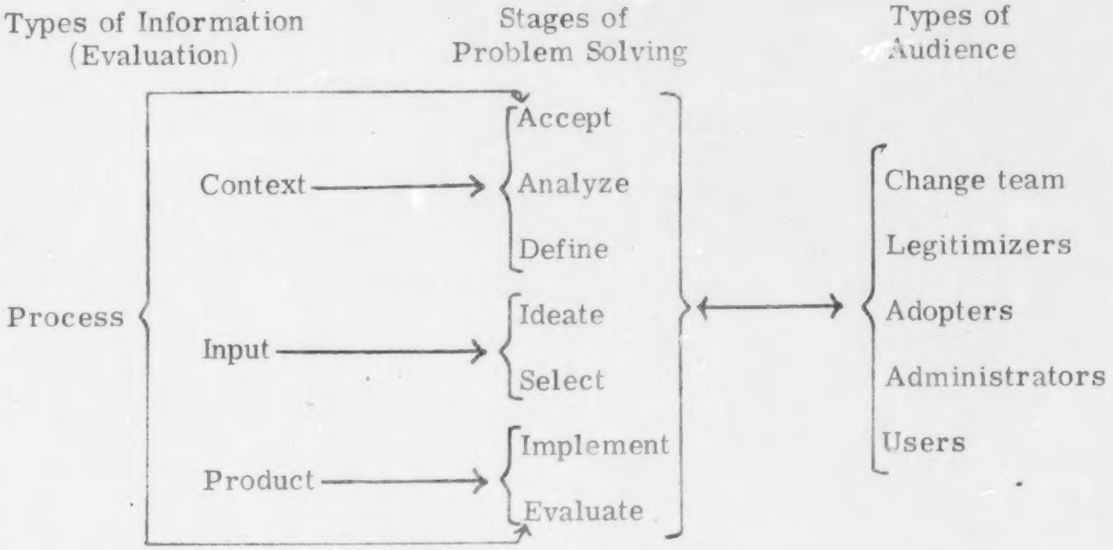
Since the work of the American Institutes for Research (AIR) is excellent and thorough, their work will not be duplicated here. Rather, the goal of this chapter is to demonstrate what the unique requirements for evaluation are, as the problem solving approach to change is implemented.

Let us recall that the basic phases in problem solving are: accepting the problem, analyzing and defining the problem, generating ideas, selecting ideas, implementing and evaluating. A requirement of each phase is that adequate information be available to do the work of the phase properly and to signal the readiness to move to a new phase. Effective change efforts are able to anticipate the need for such information and are able to provide the needed information to those making decisions. Another requirement is to identify who the decision makers are at each phase of problem solving and who else besides decision makers will need information in order to support the work of the change effort.

So, a basic assertion of this chapter is that decisions to change educational programs are best based on information gathered and utilized systematically. No matter how eager we are to present ourselves and our programs in a favorable light, objectivity in reporting is vital. This chapter will help the reader 1) to identify those persons and groups who will need information and who can provide information, 2) to develop procedures for collecting information and 3) to decide on ways for disseminating information as is needed. To put the matter simply.

WHO needs WHAT information WHEN, in order to decide? Figure 1 attempts to provide an overview of how problem solving, the management of information (evaluation), and types of audience (who) fit together.

Figure 1


Types of Information (Evaluation)
Stages of Problem Solving
Types of Audience
Process
Context
Input
Product
Accept
Analyze
Define
Ideate
Select
Implement
Evaluate
Change team
Legitimizers
Adopters
Administrators
Users

Types of Audience (WHO)

In a general sense, there are five important decision making groups in any educational planned change program (see Figure 1). First, there is the team planning the change. In Chapter IV on team building, you may have followed a complete cycle of evaluation with yourself as the evaluator and the decision maker. Notice that the chapter began by asking you certain questions and then, depending on what you discovered as you looked at your responses to that information, certain improvement actions were recommended. You learned that the cycle could be repeated as often as needed.

A second role or group of persons who will need information about your change efforts will be those administrators who, although they may not be directly involved, will have to make decisions which will affect the level of support for your program. Such persons will want, at a minimum, to know how much the new procedures you are advocating will cost, both initially and over time. They will want to know how much time will be required to install the new procedures, and, of course, they will want to know why any change at all -- to name only a few such questions.

A third group, who may or may not have authority to make direct decisions, consist of all those special interest teacher groups, community groups, etc., who have the function of legitimizing your recommended changes. Such persons will want to know what the risks are, what the costs are and what experts are saying about your recommendations.

Next, there are those persons, the adopters, such as teachers or counselors, who will have to change their behavior in order to use the changes being advocated. These persons will want to know why, what is involved, what will they gain if they try the change.

And finally, the users, who might be students, teachers or even administrators, will want to know what they will gain, what they might lose and why.

Having identified the basic groups and/or persons who will be needing information, the next step is to develop the complete set of questions which, if answered, will allow each of the above groups to make rational decisions about your project.

Types of Information (Evaluation)

Look again at Figure 1. This time we are going to examine the column, "types of information (evaluation)". What the column is intended to communicate is that there are different types of information needed; i.e. context, process, input, product, as problem solving progresses over time. In what follows it should also become clear that the different types of information require that different questions and different methods of data collection will accompany each different type of evaluation. Now let us look at each type of evaluation in more depth.

The first is that of the context[2] in which the change is likely to occur. In this category questions need to be raised as to what the situation is like and what could it be. Such questions define what is and contrast it with what could be. The gap between "is" and "could be" defines the need. Information about context must provide answers to such questions as: "What's wrong with the way we are doing it now?" "How do our kinds compare to national norms?" "What are we doing now that could be done better?" The major objective of asking questions about context is to define the environment where change is to occur, the environment's unmet needs and the problems underlying those needs.

Questions about context, when answered, should allow you to describe the following in detail. First, What is the current program or programs that will be affected by your efforts? How much do they cost to operate? Who has vested interest in maintaining them as they are now and what needs are unmet? Next, you will want to seek answers to the way current programs are structured in terms of how long they take to operate and in terms of the hierarchy of authority.

As the questions of context are answered the first three stages of problem solving, accepting, analyzing, and defining, are accomplished because the information produced from such questions provides the basis for change agents to identify and define the problems they are facing. For methods of collecting data on context questions see the American Institute for Research (AIR) module.

A second general category in which questions need to be raised is that of input. Literally, this is what you will be doing to bring about change. This refers to your own change effort. The questioning process in this area must be exhaustive. For instance, just a sample of questions would include: What are our objectives? What will be the terminal behaviors of people successfully influenced by our change efforts? What facilities will we need? How much time will we need? etc. In this category your task is to define your efforts in terms of your program of change.

Input evaluation accompanies the problem solving stages of generating alternative ideas (ideate) and selecting one particular course of action. In order to gain some perspective the following exercise and example is provided:

---

[2] Stufflebeam, Daniel L. "Toward a Science of Educational Evaluation," Educ. Tech. (July 30, 1968), p. 6

Suppose in your school there is a problem with regard to faculty meetings. They are not interesting. They don't seem to contribute much to problem solving. The principal uses faculty meetings primarily to give staff information about decisions that have been reached elsewhere. It has been decided that faculty meetings should provide greater opportunities for capitalizing upon faculty resources in dealing with school problems.

What ideas can you generate, right here and now, that might serve as possible solutions to the problem stated above? What comes to your mind that might be done to work toward the goal that has been identified?

1.
2.
3.
4.
5.
6.
7.
8.

You have just engaged, in a modest way, in one of the important steps in problem solving -- ideation, the identification of a range of possible alternative actions. It is surprising how many problem solvers, in their eagerness to get on with the task, skip over this step and settle, instead, for a single solution. It may be getting on the current "bandwagon," jumping to a popular solution, that is seen as the thing to do. It may be that one solution has a particularly strong and influential person, such as the principal or a respected faculty member, advocating it. Sometimes a particular "solution" is so available and visible that schools may start installing that solution before they have a clear idea of what the problem or the goal is!

It is wise to resist the temptation to decide quickly on the approach to be used. A better way is to be able to choose the idea that has the greatest potential from among a number of promising ideas. It is often the third, fifth or tenth idea that comes to the fore when such a process is used, rather than the first or most obvious one. Searching such alternatives before deciding on the one to proceed with is the work of input evaluation.

The third general category of questions have to do with the process of change as it is going on. In other words, you will want to be asking, "How is it going?" Other questions may include, "Is our team functioning any better now than when we started?" (The questions of Chapter IV are process questions.) Are we meeting the schedule that we set for ourselves? Have we noted any growing resistance to our efforts? Which of our methods do we need to alter? Process questions should help with the unfolding of the project. Asking questions about process helps to identify rates of change. Such questions are analogous to the gauges on a car which tell us how fast we are going, whether we have enough oil and what the water temperature is. Such questions will also help us to re-think and recycle our activities.

Again, referring to Figure 1 at the beginning of this chapter note that process questions relate to all phases of problem solving. It is process data that helps to tell us whether we need to return to a previous stage of problem solving. Perhaps as we were trying to select a change strategy we find that while we are satisfied with the strategy it requires that we go back and redefine the problem. Process information may also tell us that things are moving along well and that it is time to take next steps. In terms of audiences, process information is usually more relevant to the change team itself since it is the locus of where decisions are made to proceed or recycle.

Finally, we must ask questions about products. What will the users of our new program be doing? How will it be different from what they are doing now? How will it be better. In addition to having developed our objectives so that we will be able to identify when something has been accomplished, we will want to specify what criteria should be held by against our goals. Figure 2 illustrates how one change team formulated a goal out of its problem definition, set specific objectives and determined what measurement procedures they would use.

Figure 2

GOAL	MORE SPECIFIC OR INSTRUMENTAL OBJECTIVES	INDICATORS	POSSIBLE MEASUREMENT PROCEDURES OR INSTRUMENTS
Improve the reading performance of students currently two grade levels below their grade norm	1. Set up diagnostic procedures for low-achieving students.	3.1 Low achieving student's general self-concept as measured on a test, improves from Sept. to May.	Administer the Coopersmith Self Esteem Inventory in Sept. and May. Compare scores. (Product)
	2. Improve self-concept of low achieving students.	3.2 Low achieving students see themselves as good at some things.	Through group interviews get students to describe one thing they are particularly good at. (Context)
	3. Provide variety of reading materials which appeal to interest level, ethnic and racial background of minority students. (input)	3.3 Low achieving students gain some satisfaction each day.	Use 1-page PMR's once a week. Ask each student what he felt good about that happened that day and what he felt bad about. (Process)
	4. Etc.	3.4 Low achieving students feel they are making progress on own reading achievement.	Devise scale to get student estimates of own progress on reading achievement. (Process)

Using the following worksheet, have your team engage in the following activities:

AL	MORE SPECIFIC GOALS OR INSTRUMENTAL OBJECTIVES	INDICATORS	POSSIBLE MEASUREMENT PROCEDURES OR INSTRUMENTS

1) Insert commonly agreed-upon goal in the "goal" column. (From your problem definition)

2) In sub-groups have participants generate as many statements of related objectives as possible.

3) Each group pairs with another group and (a) gets consultation and reaction to the statements of objectives, and (b) requests consultant group to suggest indicators for each goal statement.

4) Reverse roles with the second group seeking consultation and the first group giving consultation.

5) Work groups return to own location. Review suggestions and decide on appropriate set of objectives and indicators to recommend to entire staff.

6) Each member of the sub-group accepts responsibility, during a one to seven day interim period, to explore resources as well as do some creative thinking about measurement possibilities for one goal indicator.

7) Decide which type of measurement will satisfy each of the audiences identified earlier.

8) Report back. Share results with total team for their review, further work and decisions.

From Questions to Information

Having decided who the important decision makers are and what questions they are likely to ask, our next task is to turn possible measurement procedures into a design which will determine how to collect information for decision making.

In this next section we will claim that the design process of turning questions into data collection procedures is essentially a mechanical process and is best accomplished by simply following a check list. This point in evaluation design is analagous to the pilot about to take off. No matter how skillful he is, unless a check list has reminded him to check his fuel, he is not likely to get very far. So, let's walk through the checklist. It is not expected that you will actually do these steps at this point; but, you will need to use them in subsequent chapters.

Step 1 Given that you have defined your change problem, specified objectives and formulated the basic questions that need to be answered for each of your audiences, the first step must be to determine the size of the unit from which information will be collected. The options are: individual, class, school, district, county, state, other.

As you can readily imagine, the size of the unit will do much to determine what information collection methods can be used. For example, suppose we want to answer the question, "How does the student experience modular scheduling?" We might decide that the best way to answer the question is to follow the individual student through a series of modules. Having made such a decision, our methods might be limited to observation and interviews. Again, the size of the unit does help to determine our over all design.

Step 2 Having identified the unit, the next step is to determine whether information is to be collected from all of the units or whether you will collect information from a sample. The primary determinants of this problem are time and cost. If your planned change will affect only ten classrooms, you will probably want to collect information from all of them. If however, it will affect seven schools and thirty classrooms and you want to collect the information at five different points in time, you will probably need to sample from classrooms. Decisions about how to draw a sample are often complicated and you may need to consult with a statistician - usually most universities and state education departments have such people available. And, even though in practice, sampling may be complex, the requirements for a good sample are not. For instance, a first requirement is that the sample avoid bias; i.e., it should not depart from the entire group in any significant way. Second, a sample must provide the maximum information for the least cost.

Step 3 In this step the task is to decide (1) if a statistical treatment of the information will be needed, and (2) if one is needed, which one(s). Again, if you decide that you do need to treat the information statistically; i.e., a "t" test of differences, a rank order correlation, etc., you will probably need to consult the texts with which you are familiar or draw upon an outside resource. Once again, the American Institutes of Research module in this series is an excellent resource for such problems as design and data analysis.

Step 4 The next decision is, for each question, how often will the information collection, analysis, interpretation and reporting cycle need to occur. The options are again quite obvious: Once during the entire project, once per year, twice, etc. Often budget cycles will determine your cycles. For information about process, you will more than likely be cycling on a monthly or weekly basis. For instance, as suggested in Chapter IV, checking on your team development might involve some form of information collection and feedback with each major meeting. Amount of information and frequency of cycling will also force you to decide whether you will need to employ the services of a computer for storage and retrieval or whether you will rely on your own mechanical systems.

Step 5 A final step in the design of information collection is to determine the actual methods or techniques to use. Again, the options are finite; they are: record keeping, self-report inventories, surveys, observations, situational tests, perceptual tests, sociometric questionnaires, interviews, measures of interest, aptitude, achievement or intelligence, and collection of the by-products of the change effort itself. A comprehensive listing and critique of available measures can be found in Measuring Human Behavior (Lake, Miles, Earle 1973).

From Information Collection to a Schedule (WHEN)

Having made the necessary decisions in relation to each of the above steps, the design must be placed in a time schedule and the tasks assigned for implementing the schedule. Scheduling, costs and task assignments for information collection can be developed exactly as is suggested for other tasks in the next chapter on action taking. In addition, you may want to provide a visual reminder of your progress as in Illustration 2.

Illustration 2

Change Program:

Date ____/____/____

Year:

Question to be answered	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
(1)		O				O				
(2)			O				O			
(3)			O					O		
(4)		O		O		O				O
(5)			O				O			O

Comments: This provides a time table and will usually be negotiated with each person or group. Actual dates can be placed in the circles. Since each circle represents a reporting date, you might also want to develop a code by each circle indicating who will receive the report; thus "T" for team, "A" for administrator, etc.

The time table in Illustration 2 should be in the form that each team member could have a copy and probably also should be displayed prominently in a room in which your team meets.

Reporting

The reporting mode(s) can be determined only after weighing three factors: setting, content and media.

Setting -- The report setting is characterized by at least two dimensions: formal vs. informal and internal vs. external.

Content -- Early decisions as to content will provide a framework or structure for the packaging of reports -- oral, written or graphic. Preliminary contents may take the form of a table or outline. Deciding report contents aids in organizing material, forming necessary transitions and focusing on audience compatibility.

Media -- The reporting media must be designed to communicate with the target audience. The diverse needs of the audiences and the complexities of the information will require the use of every potentially useful means of communication. The techniques and media supporting the three basic forms of communication (oral, written and graphic) are limited only by imagination.

	INTERNAL	EXTERNAL
ORAL	- Reports to committees - One-to-one feedback - Professional staff meetings . Television . Radio	- Television reports - Radio Reports - Newspaper interviews - Speeches - Reports to the public via . Board of Education meetings
WRITTEN	- Required Evaluation reports - Ad hoc project evaluation - reports: interim and final - Office bulletins - Office memoranda - Position papers - Required system reports	- Mandated Federal-State reports - Public reports - Public and school profile - School newsletters, bulletins - Reprints - Press releases - Occasional papers - Periodicals - magazines
GRAPHIC	- Flip charts - Overhead projector - Slides - Films	- Flip charts - Overhead projector - Slides - Films

Summary

This chapter has taken the position that project evaluation can best be thought of as a process of collecting and managing information which will aid decision makers. With that definition, the chapter proceeded in a check-list-like manner to review the basic steps needed to answer the basic question:

> "WHO needs WHAT information, WHEN in order to DECIDE?"

Ernst

CHAPTER VI

Action Planning

Having formulated your goals, considered alternatives and selected alternatives for action, this chapter will help you design your action steps in an orderly, efficient manner. This is the implementation phase of problem solving. I find this stage in the planning of change to be the most stimulating. As you begin to lay out activities, you have the opportunity to watch the creation of a full blown program out of what has, up to now, been only an idea. It is in this stage that your plan is transformed from a hypothetical exercise to concrete actions.

This is also a rigorous step. You will find that you must be painfully honest about such things as: how long something will take to do, how much it will cost and who really has the skills to carry it out.

A mistake that is often made in action planning is to make major assignments to individuals without regard to that individual's work load, abilities or size of assignment. For instance, in one curriculum change project, the planning group asked Jim to "develop the materials we need." This task, when analyzed, required: (1) a search of relevant sources, (2) consultation with experts, (3) procurement of a printing facility, (4) field test sites and administration, and (5) development of a budget to name only a few of the major functions. As is so often the case, Jim was supposed to do all these things in addition to his regular work load. Needless to say, the materials were not ready in time.

This section will try to introduce to you such procedures as listing activities, putting them in sequence, determining which are most critical and scheduling their completion. This section is designed for the person who is new to action planning, but will also serve as a useful review for those already knowledgeable in action step taking. An example is provided below with plenty of opportunity for you to stop and use the action steps on your own project while learning.

This example comes from a team of teachers, whom we shall call "The Delmont Team;" their team of four had responsibility for children with learning disabilities in the context of regular classrooms.

Background

The Delmont Team was composed of four classroom teachers, a special education teacher and occasionally a counselor. The children they focused on were in regular classrooms, but all had learning disabilities ranging from hearing loss and reading difficulties to severe behavior control problems with tantrums, tears, and perseveration. Without exception, all of these middle school children were performing at least two years below grade average.

The Delmont Team did not start out to develop a "change" project. Rather, they were in the habit of meeting once a week to review each child's progress and learning needs. Out of such regular meetings a project emerged. The ways the team diagnosed the learning needs and how they developed their objectives are not considered here; suffice it to say that by December of the academic year the Delmont Team was ready to plan for the implementation of specific activities and the steps outlined below follow the team through their activity planning. You will find opportunity for actual practaice in developing an activity flow diagram.

As mentioned earlier, by December the team was ready to develop a plan for taking action. They had arrived at this point by taking as their major objective, to develop a co-ordinated curriculum for the children with learning disabilities which would allow the children to proceed at their own rates in each of the team's curriculum areas and which could be utilized within the context of a regular classroom.

The question they now faced was: "What specific activities must we accomplish to achieve this objective?" Their initial efforts yielded the following:

Delmont Team Activity Identification

Define what these special students need to be functional people

Describe the functional student in each subject area

Develop an internal proposal

Request decision from principal to proceed

Request support from counselor

Request support from curriculum supervisors

Plan evaluation

Identify materials

Assembly identified materials

Select and/or construct appropriate materials

Write up individual curriculum packages in each subject area

Try out semi-final packages with students

Evaluate

Write interim progress report for principal and supervisors

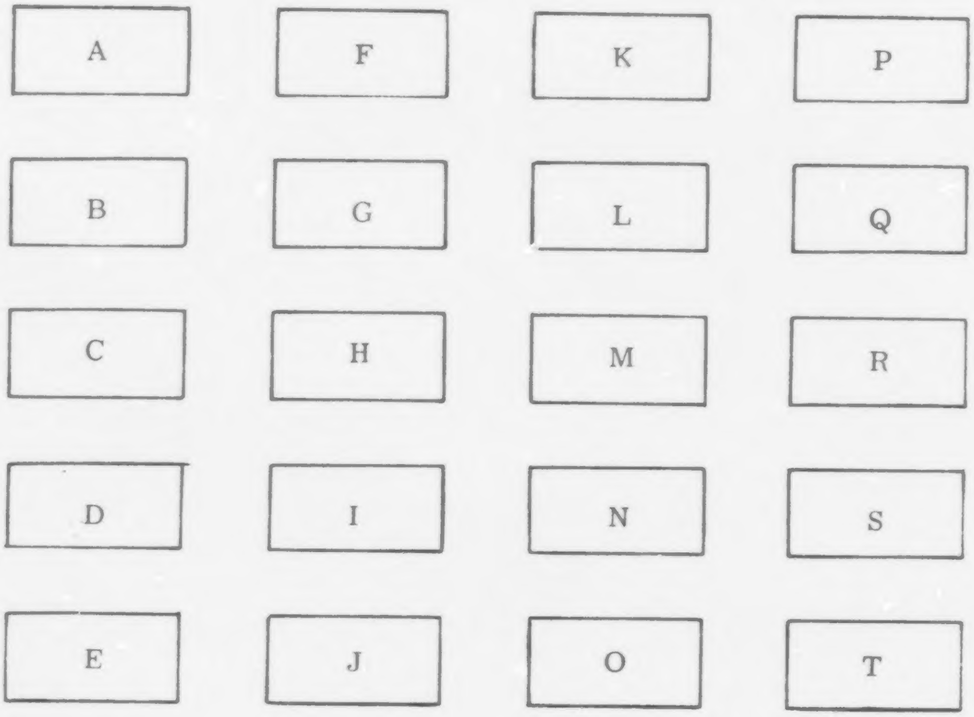
Determine whether project should be continued/ expanded/ discontinued

Below are described the procedures the team used to build the list and transform it into actual actions.

The procedure was to give each member of the team a pack of 3 x 5 cards and ask them to list as many activities as possible in fifteen minutes, with a different activity on each card. When you use this procedure, it will result in considerable overlap across individuals, but because each person will also generate some unique activities, the result will be a very comprehensive list of activities.

The 3 x 5 cards can be displayed for all to see by tacking them onto a bulletin board or by putting masking tape on the backs and sticking them onto a wall. Later these same cards can be rearranged into an activity flow chart; but for now, simply stick them up as in Diagram 1.

Diagram 1



A second step which will help to insure completeness of activity listing comes later when a budget is developed to determine how much the project will cost. This will be discussed in some detail later.

The next problem the Delmont Team faced in this action taking step was to arrange the listed activities in order in which they would have to be completed. In short, the activities must be sequenced. A chart which shows the overall direction of work activities is usually referred to as a flow chart or network. Activities are usually represented on flow charts by straight lines or arrows; the beginning and end of such activities are usually represented by circles. The circles have numbers placed in them to identify each activity. For example: (using a Delmont activity)

Describe the functional student in each subject area -- can be conceived of as beginning when the teacher begins to write the description and ending when the paper is finished. Such an activity might be represented on a flow chart as

Since the line is an abstraction, we still need the original list of activities, but we can now list it as follows:

01-02 Describe the functional student in each subject area

This tells us that the activity begins at event 01 and ends at event 02. This shorthand will become very important as you will now see. For we are now ready to solve the problem of how to build a network which at a glance will tell us if two or more activities can be done simultaneously, or if activity 15-16, for instance, must await the completion of activity 13-14 before it can be started. The way we do this is to adopt a rule which states: "Any activity to the right of any other activity and connected by a mutual event must await the completion of the activity to the left. However, activities which are above or below each other may be worked on simultaneously." Again let us return to examples. Let's take the activities:

Develop an internal proposal
Request decision from principal to proceed
Request support from counselor
Request support from curriculum supervisors
Plan evaluation

From these we can create a network as in Diagram 2.

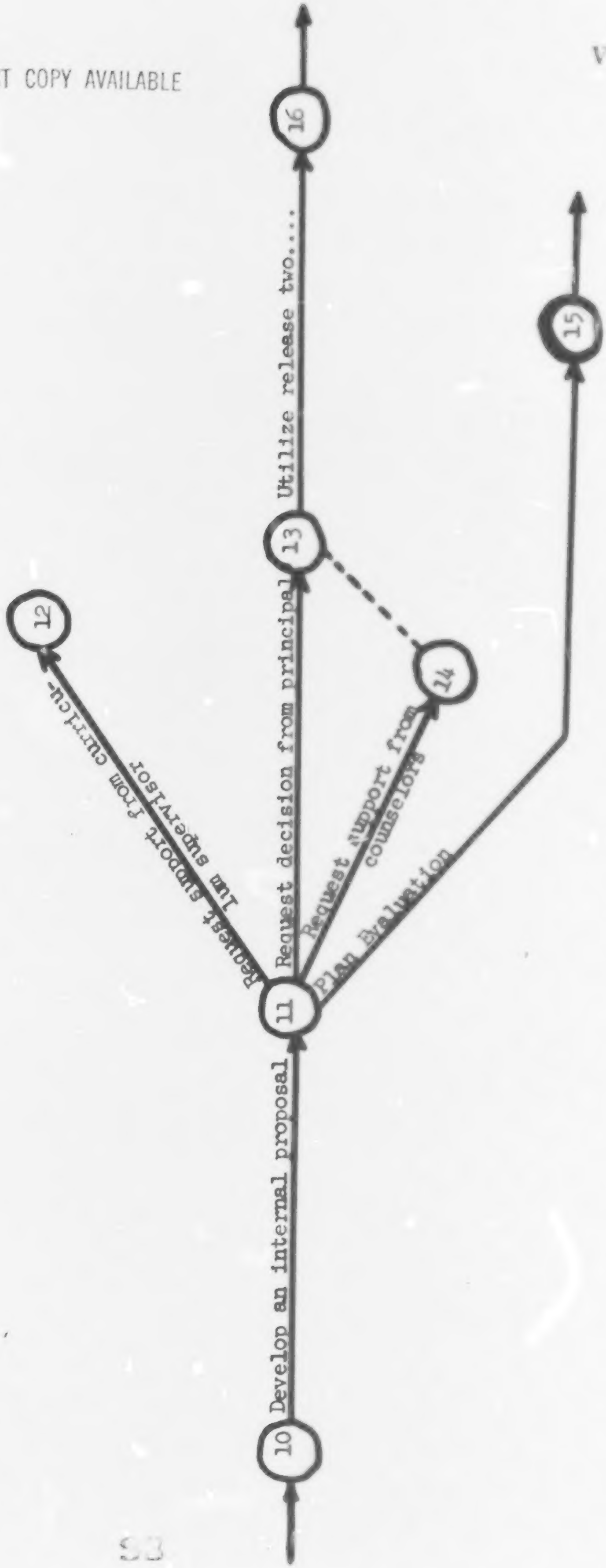

10
Develop an internal proposal
11
Request support from curriculum supervisor
12
Request decision from principal
13
Utilize release two....
16
Request support from counselors
14
Plan Evaluation
15

Diagram 2, Stage 2

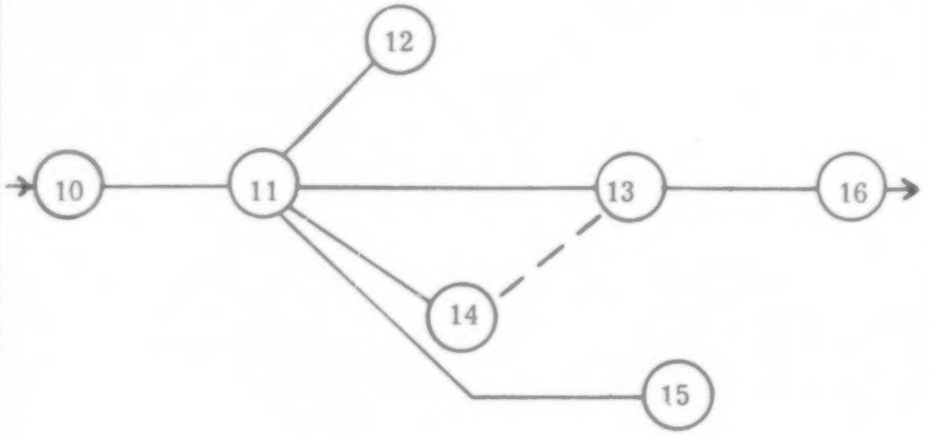
Next, we simply transpose the identification numbers on Diagram 1 to the list of activities, thus:

Activity Identification
(for those activities in Diagram 1 only)

10-11 Develop an internal proposal
11-12 Request support from curriculum supervisors
11-13 Request decision from principal to proceed
11-14 Request support from counselor
11-15 Plan evaluation
13-16 Identify materials

This now permits us to go back and reduce the network or flow chart to essentials, thus:

Diagram 2, Stage 3

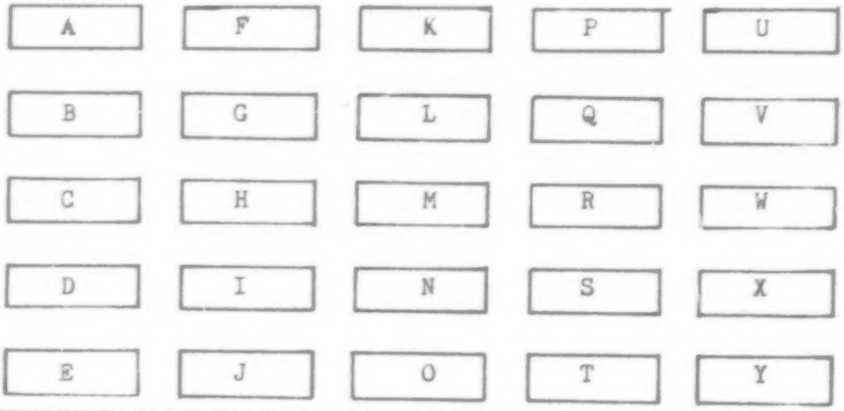


Having described the basic elements of activity flow chart, let's develop an activity flow for the tasks required to carry out one of your objectives. Write your objective in the space provided.

My team's objective is:

Now, using the 3 x 5 cards, have each member list as many activities as they think are needed to accomplish the objective. Immediately you will note that since the cards are movable, they can be arranged in any order. Thus, just as in Diagram 1, you may simply display them as follows:

Diagram 3



(Note: letters have been inserted for purpose of clarity.)

Next, put the most time consuming activities in the middle and those which have to be done early towards the left (see Diagram 4).

Diagram 4

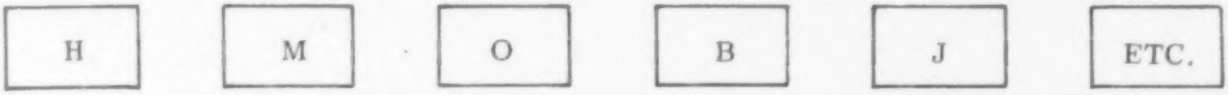


Diagram 4 begins to show us which are going to be the critical activities. In the next step, arrange all the 3 x 5 cards according to procedures used above by the Delmont team. While your cards might take any shape, a possible display might appear as in Diagram 5.

Diagram 5

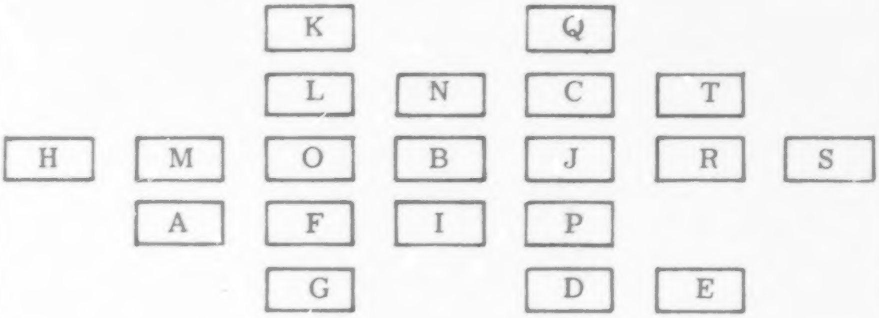
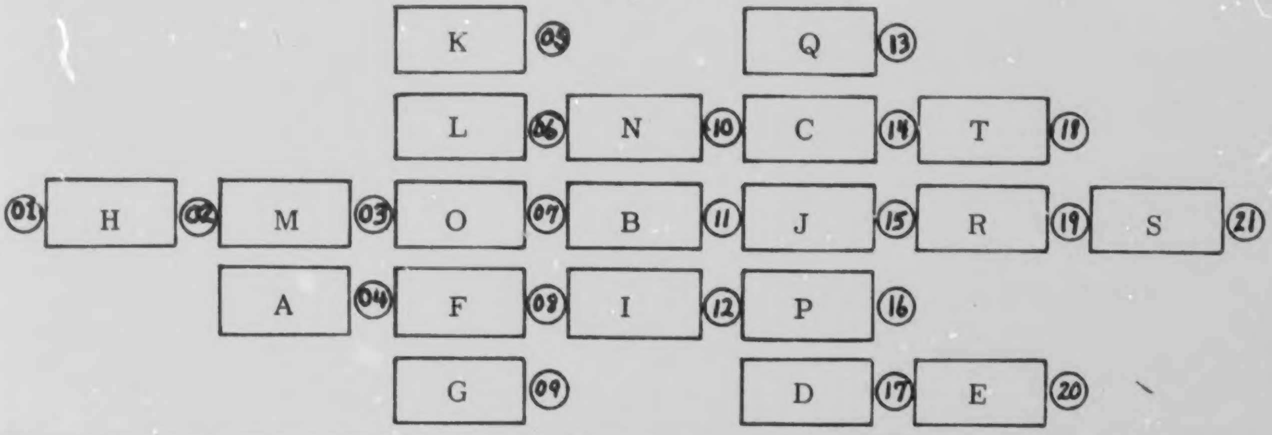


Diagram 5 displays the information that certain activities (those listed vertically) can be done simultaneously; for instance, activity groups M, A, K, L, O, F, G, N, B, I, etc.

The next stage is to label your activities with access numbers. This has been done in Diagram 6. (In actual practice, sticking the 3 x 5 cards on a blackboard permits writing numbers right on the display.

Diagram 6


K
05
Q
13
L
06
N
10
C
14
T
18
01
H
02
M
03
O
07
B
11
J
15
R
19
S
21
A
04
F
08
I
12
P
16
G
09
D
17
E
20

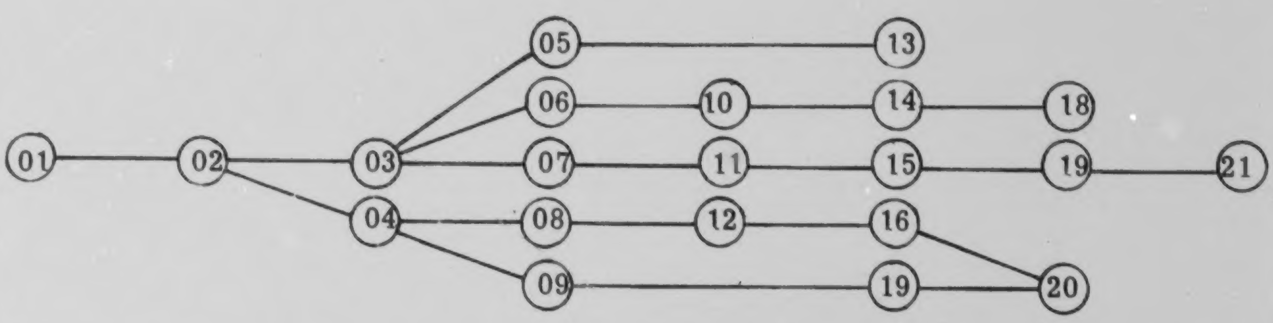
Now activity "H" can be listed 01 - 02: H

Activity "M" 02 - 03: M

until all activities are listed.

After listing your activities with access numbers, remove the 3 x 5 cards and your product will appear as in Diagram 7.

Diagram 7


05
13
06
10
14
18
01
02
03
07
11
15
19
21
04
08
12
16
09
19
20

* Again in actual practice, instead of letters you will have activity descriptions. Try developing an activity flow for your planned change effort.

Returning to the activity flow chart of the Delmont Team (Diagram 2, Stage 2), the products developed thus far give considerable information in very little space. As a change agent team using the activity identification list and Diagram 2, Stage 2, it can be determined that:

1) The activities listed are only a subpart of a larger network of activities. This is determined by the fact that events 10, 15, 16 have arrows leading to them or away from them.

2) We know that activity 10 - 11 must be completed before any of the subsequent activities: 11-12, 11-13, 11-14, 11-15, 13-16 can be started.

3) By inspection, it is obvious that activities 11-12, 11-13, 11-14, 11-15 can be worked on at the same time.

4) It is also clear that activity 11-13 is a critical activity because activity 13-16 cannot begin until it is complete. However, activity 11-14 is also important. Notice the dotted line between 14-13; this indicates that while there is no activity occuring between event 14 and event 13, it was the judgment of the change team that it did not make sense to start activity 13-16 if the support of the counselor could not be obtained. On the other hand, the team felt it would be possible to start 13-16 without the support of the curriculum supervisor.

To conclude this section on action planning three problems need to be considered; they are: time allocation, dollar allocation and role allocation. Actually there are many different ways to approach each of these problems; the next few pages will suggest one way and the resource bank suggests references which will introduce you to several other ways.

The procedure suggested here works on the problems of time and dollars simultaneously as follows. Let's return to activity --

10-11	Develop an internal proposal

The work sheet for developing that activity is contained in Illustration 1.

Illustration 1

10-11 Develop an internal proposal

		Amount
Professional man days	5 @ 84.90	424.50
Clerical secretarial man days	3 @ 31.60	94.80
Supplies and materials	paper & reproduction	10.75
Equipment rental		-
Travel	3 days @ 25.00	75.00
Consultation		-
Phone		6.75
	TOTAL -	$611.80

The figure $611.80 tells us how much we estimate activity 10-11 will cost.

You may find it an interesting exercise to try budgeting some of the other activities in the above examples. If you do, you will probably find that you must break down the activity into smaller tasks so that you can determine how many professional and secretarial man days to allocate to the activity. This was done for Illustration 1. It was estimated that two of the team would spend one day together (equaling two man days) producing a detailed outline of the proposal and then the third team member would write the final proposal in three days, thus the activity requires five professional man days. It was also determined that the typist could start before the final proposal was finished, but that she would be typing and reproducing the paper for at least one man day beyond the completion of the writing.

By adding the professional man days and the extra secretarial man day, we would estimate that the activity could be completed in six calendar days. It is from this kind of calculation that we derive our total time required in exactly the same way that we determined our total budget.

* The experience of the author in using this method has resulted in many projects in which the average error of difference between what was estimated in the budget and what was actually spend was about 3%. For example, in a recent budget of $87,000 the activities were completed by actually spending $84,290.

Finally, we are now ready to allocate activities to persons and, from a task point of view, this is done very simply.

	Team Members				
	Sue	Jim	Lou	Diane	Mary
10-11	1*	-	1	3	-
11-12	1	3	-	-	-
11-15	3	-	2	1	4
Totals	5	3	3	4	4

* Numbers indicate man days

If this kind of allocation is done for each activity, each person knows both how much time will be required of him or her and will also know what is required. However, from a process viewpoint, assignments are not as easy. For a moment, let's consider the human or process issues involved.

Not everyone will be equally suited for the tasks to be assigned. Therefore, each team member will need to be able to state his or her individual strengths and limitations. In addition, team members will have to be open with one another in sharing their appraisals of one another's abilities. The communication exercise on behavior description in Chapter IV will be helpful here because the best way to tell another person about his or her suitability for a task is to describe behaviors which you have seen them perform and then indicate how well they were performed as a criterion for this task assignment. Experiencing such direct discussion of abilities may be difficult, but without it you will be sure to end up with people trying to do tasks not suited for their abilities. Carried to an extreme, this will surely lead to the project's failure and to severe interpersonal strife among team members.

A second issue involved in a task assignment is time. Frequently change efforts are engaged in on top of regular teaching or administrative loads. Those accepting or volunteering for assignments must ask themselves, "What will I have to stop in order to work on this new assignment?"

Tasks may also be viewed as "safe" or "risky." For instance, reproducing a paper may be seen as a much safer task than meeting with the board. Not all persons will view tasks in the same way on this dimension, so what is seen as risky for one person may not be by a second.

In summary, making task assignments from a process viewpoint becomes a matter of striking a delicate balance among such factors as: ability, available time, personal liking for the task, and a fair distribution of work load.

Having followed the flow of this chapter and practiced the exercises, you should now be ready to develop networks, budgets, estimates of time needed for completion and to allocate activities to team members. In turn, such skills will insure that you get the maximum use of your human and dollar resources.

CHAPTER VII

The Support for Implementation Effort

When intentions, plans, decisions and commitments face the moment of truth, of playing for keeps, of risk-taking action, it is critical that there be appropriate internal and external support to get action "over the hump" and, as well, support is needed to maintain motivation and effort when blocks and unexpected difficulties are encountered. As Piet Hein puts it in one of his books:

> "Problems worthy of attack
> prove their worth by hitting back."*

We can think of two types of needed support: (1) task oriented support that is concerned with problems of competence and action skill, and (2) process oriented support that is concerned with risk-taking attitudes, motivation, temptation to give up and interpersonal relations. Let's review briefly some of the strategies you may want to consider in each of these important areas of need for support.

Support for Developing and Utilizing Action Competencies

1. Anticipatory skill practice

   One of the most effective propositions for successful action is anticipatory rehearsal in which, with the help of colleagues or a consultant, you create the types of events and critical interactions you anticipate you will be facing in action. In this "not yet playing for keeps" situation, you are free to try out alternative behaviors, get friendly feedback, and re-try. Such methods are described fully in Role-playing in the Classroom.**

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* From Grooks by Piet Hein, Doubleday and Co., Garden City, New York, 1966.

** SRA Booklet by Bob Fox and Ronald Lippitt.

2. Progress Feedback

One of the best ways of "staying on the beam" in any task is to plan ways and times to check progress. It doesn't help much to wait until the end of the year to re-test the students or check the work accomplished by the members of your team. The secret of success, and the prevention of wasted energy, is to check progress often enough so you can correct the direction of your effort if needed, or discontinue some activity that isn't paying off, or re-plan a new push. It might be very useful to review the suggestions in Chapter V to insure that periodic reviews are implemented.

3. Critical Confrontation Role-Playing

It is very hard to help each other cope with difficult situations and give each other support if all we do is talk to each other about the "problem I'm having." Many groups have found it very profitable to conduct role-playing clinic sessions where persons bring in "my problem situation" by recreating the critical event, using anyone of the team to take the roles of the others, briefing them in private how to behave. Then the event is produced, but is stopped at the critical moment of "What would you say or do now?" Everyone brainstorms alternative action ideas, these ideas are discussed and some of them tried out -- either by the person seeking help or as a model by one of his colleagues.

4. At the Elbow Colleague

Another helpful way of growing in competence is to invite a colleague to observe the way you are handling situations by going along as a visitor and holding a review session afterwards.

5. Finding Resource Persons

One of the greatest strengths of a competent change agent is to know when and how to ask for help. Providing linkage for clients or learners to appropriate resource persons or materials is a great skill and service.

Sometimes you will find it feasible to seek out the needed resource and get the information or other help you need to take back to those you are helping -- this may mean a face-to-face interview or a telephone interview or locating and reading relevant resource literature.

Other times it means arranging for the resource person to come to your situation, briefing them ahead of time on what is needed and briefing your clients on what the resource has to offer and helping plan the interview or agenda of discussion. "Asking them to come in and make a speech" is certainly the poorest way to get what you need from human resources.

We believe these five strategies will be of great help in supporting the development and use of work skills in getting the important task of educational improvement accomplished. Now let's look at some ways to focus on the process of our relationships, to ensure more effective work.

Process-Focused Techniques to Improve Our Effectiveness

1. The Internal Dialogue Procedure

One focus of process problems and of support for motivated effort is, of course, the process inside of each of us. A British psychiatrist, Dr. John Rickman, talks about our "Internal Society." He presents the idea that each of us is really a group, i.e., we have a variety of internal members or voices that have different ideas and attitudes about what we should be and do.

We recommend that in a team meeting, you try a dialogue project on "what do my various voices or parts say about the advantages and disadvantages of the risks and time and energy requirements of the change effort we are contemplating or are involved in?"

This makes it legitimate to share our natural ambivalences about action-taking. This sharing often gives us the support we need to cope with some of our resistances to action and to correct false assumptions we are making about "where each of us is."

2. Commitment to Teammates

The work of Kurt Lewin and his associates on personal and group decision making indicates that one of the strongest supports for transforming our goals and intentions into action is the act of commiting ourselves voluntarily and publicly to other persons whose opinion of us we care about. So, we recommend that you develop procedures of sharing and recording commitments and also decisions about deadlines and checkpoints for progress. Agreement to periodic review of progress on commitments is an important part of this process of support.

3. A "Stop-Session" Norm

One of the most important standards for a group to develop is to make regular use of a procedure of "stopping to take a look at how we're doing." There are several ways of using these process stop-sessions. Other groups have found these patterns worthwhile.

A. Rate and share - everyone fills out a 3-5 minute slip with a couple of rating scales and questions, such as:

1) How do you feel about the way the group is working together?

very satisfied	fairly satisfied	somewhat dissatisfied	quite dissatisfied

Please comment on why you marked the scale where you did:

2) How do you feel about your influence in the group interaction?

very satisfied	fairly satisfied	somewhat dissatisfied	quite dissatisfied

Please comment on why you marked the scale where you did:

3) After you have shared your data on these two questions with each other, as consultants to yourselves as a group, what recommendations for improvement of group process would you make to yourselves? ______________________________

____

B. Sharing feelings - stop and have a brief discussion on some focal inquiry questions such as:

"How are you feeling about the way things are going right now?"

"What factor may be inhibiting our openness of communication?"

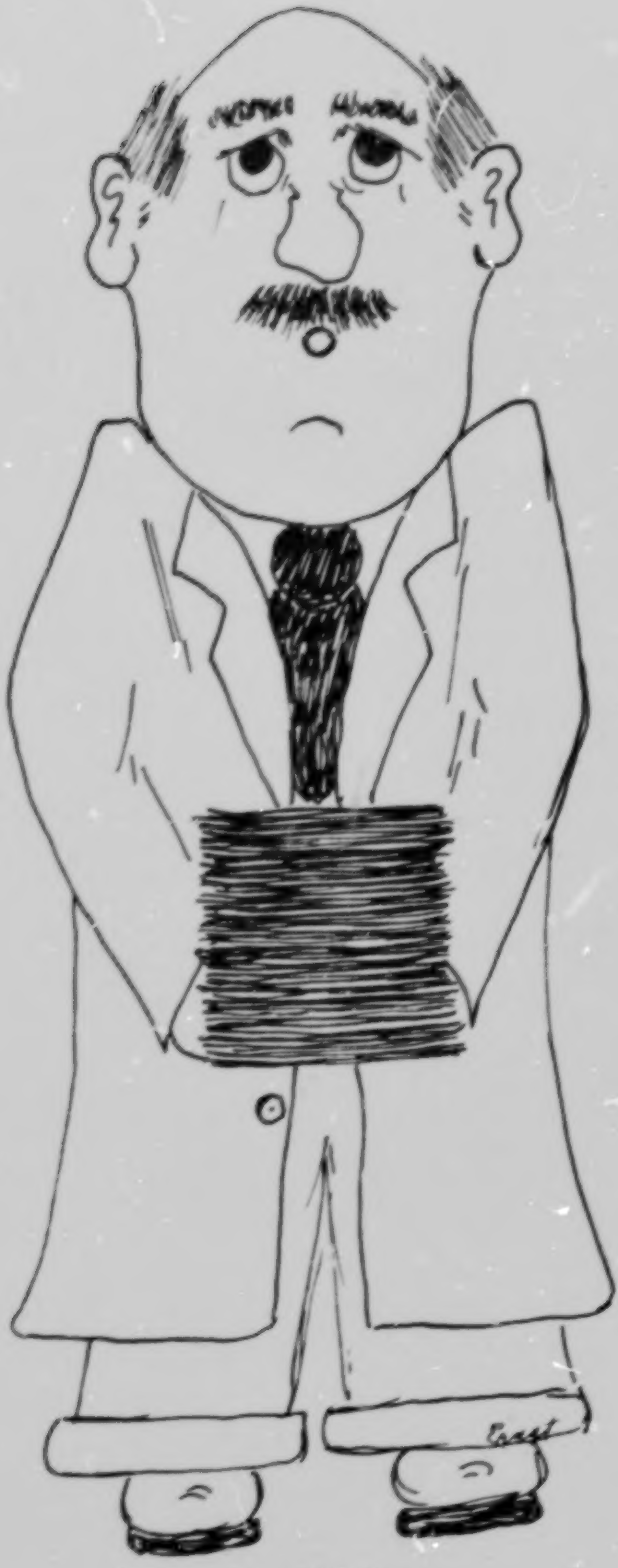
"What change might we make in our membership roles to support more productive collaboration?"

C. Using an observer - Some groups find it helpful to rotate a role of process observer among themselves or to invite an outside observer to sit in and share their observations. In such a procedure the group agrees to either stop at certain times to provide the observer a chance to give feedback or agrees that the observer can choose times for feedback that he or she feels are appropriate.

4. Involvement of Key Significant Others

Sometimes the greatest support need is the motivating reward of evidence of concern and support by key sanctioners, decision-makers, power figures. So arrangements to hold periodic "consultation sessions" with such key persons may be of great mutual value.

We hope these suggestions will prove of help to your team as you work on implementing some of your ideas about the improvement of education. We can't afford to let good ideas die or exist half-heartedly when change is so vitally needed.


Ernst

CHAPTER VIII

Continuity and Closure in Educational Development

Every educational improvement project has some kind of time perspective in the minds of the innovators. They want to help a particular group of students or colleagues right now, but they also hope the practice will continue and contribute to the learning and professional development of future students and colleagues also, and, perhaps, even influence education elsewhere. These are all reasonable hopes, but such objectives must be kept in mind as part of the developmental effort.

Any successful educational innovation should (1) continue to be revised and improved by the innovators, (2) spread to others in the system, or (3) become an available resource for educators elsewhere who are in need of such a resource, and perhaps (4) be deliberately phased out or terminated as new alternatives become available. Let's review a few techniques that may be helpful to your team under the three headings of (a) Maintenance and Improvement, (b) Spread - Internal and External and (c) Phase-Out.

Maintenance and Improvement

First there is usually a need to demonstrate the idea is feasible, can be made operational; then we need to evaluate the pay-off -- the degree to which it meets our objectives; and, then we want to work on revising and improving the first model. We must plan for all three of these objectives. Here are some ideas that have worked for others.

1. Getting Feedback on Feasibility

How are the consumers reacting? Are they finding the new practice useful? An improvement?

Actually the chances of acceptance of your development project are enhanced if you ask for feedback of reactions from participants. Our experience is that group interviews are usually the most informative, but individual reaction sheets are also very useful and can be made simple enough so not too much effort is required to respond. It is important to let your respondents know why you need their reactions and what will be done with them.

2. Documenting How It Works

All too frequently creative educators have developed a very significant practice and evaluated it as successful, but have done none of the detailed documentation of what was done, and how, which is critically needed to describe the innovation to others, or to use for purposes of revision. A plan, and division of labor, on project documentation is critically important.

3. Periodic Progress Review

In Chapter VII we have described the periodic review process. Sometimes it is very valuable to involve outside "expert validators" in this process. One focus for this inquiry is ideas for change and improvement.

4. Assessment of Pay-Off

The evaluation of the degree to which goals are being achieved can be a very complex or a relatively simply procedure. There are many good guidebooks on evaluation. The procedures outlined in Chapter V are an excellent start. We urge that no matter what instruments are needed, the participants be involved in the purpose of the evaluation and that brief reports be prepared for them of the summary of the findings. Usually the critical part of this process is the interpretation of the findings and many of the best insights come from the participants if they have an opportunity to review and think about the data.

5. The Involvement of the Sanctioners and Decision-Makers

Long before questions of budget for the second year or interpretation of the activity to the Board of Education or a parents' group, or Community Advisory Council comes up, it is important to have key leadership figures involved in "seeing what's going on" and involved in decisions about purpose of next steps and about what has been gained. Frequently innovative educational teams have felt frustrated and hostile by the apparent lack of support by administrators or misrepresentations of what they are about; but, the unfortunate fact is that no initiative has been taken to help the administrator be connected to the team and to understand in depth what is being attempted and how the effort is faring.

6. Organizing for Revision

When the action is on and all energy is going into making the new practice work, it is hard to focus on the commitment to use current experience as a basis for revision and improvement of the model. There are several ways of helping ourselves cope with this responsibility.

a. One way is to have a file folder or box into which everyone puts "Ideas for Improvement" any time they occur. One group had colored cards with a dittoed heading which they put into a "revision ideas" box.

b. Another idea uses a division of labor concept that one of the team is going to be the editor-writer of the revised materials. Sometimes the person is also the project documentor.

c. Another idea is to have "ideas for revision" on the agenda of every progress review meeting.

d. Setting aside on everyone's calendar, and in the budget, a weekend retreat, or a "week of work" to focus on revision when the evaluation and feedback data are available is another effective mechanism.

The main point is that there must be pre-planning for the revision effort to ensure that it will happen adequately.

Now let's look at what's involved in giving others an opportunity to use what we have learned.

Spread - Internal and External

1. "Budding-off" within one system

One innovative educator said, "One trouble with doing something new is that other people get curious and begin to use up your time." This is one of the interesting dilemmas of educational innvoation. On the one hand you want to make your change "quietly" and devote your energy to making your new idea successful; but, on the other hand if your colleagues are to benefit from your learning, they need to become involved in knowing what's going on so they can get warmed up to the possibility of using what you are learning.

We believe it is important to keep colleagues informed of problems and successes. They are likely to be less time demanding if you plan special information sessions and special observation opportunities. If you create mystery or sense of exclusion, you are not only reducing the changes of continuing support for yourselves, but you are greatly reducing the chance that your idea will spread and influence the lives of other students.

2. Packaging for use by others

It is much harder for colleagues to use a new invention in educational practice than a new invention in technology or agriculture like a new machine or new seed or fertilizer. New educational practices are usually not just adopted exactly as we developed them, but rather adapted to fit the style and situation of the other. This means they must have a much more thorough understanding of our purposes, rationales, values and techniques. Because new skills are often needed it is critical that we develop briefings, core materials and resources to help learn how to make good quality use of our experiences. Many recent innvoations are transmitted effectively because multi-media communication materials are carefully prepared; such as, cassette tapes and slide-tape presentations. It does not require investment in technical specialists for a team to prepare a "dissemination kit" to help others use their experiences.

3. Visibility strategies

There is a very unfortunate tendency for creative educational innovators to avoid "blowing their own horn." This is a serious restriction on the "free trade" flow of significant advances in education; we strongly support the team taking initiative to:

-- get on the programs of professional meetings

-- offer reports in faculty meetings and institutes

-- write brief articles for educational periodicals

-- conduct an informal seminar to inform those who might find your experience useful and interesting

Why should other educators and many children and youth be deprived of a higher quality educational experience because of a tradition of fake modesty?

4. Distribution

It is often very difficult to arrange for the production and distribution of your resource materials. Some teams have been quite successful in doing an economical production themselves and selling the materials at a price that permits them to recover their investment.

Others make connections with an appropriate and interested publisher.

The team may need some consultation on exploring the best distributing process.

Phasing Out

1. Decentralizing

In an effective educational development process frequently there comes a point where the central coordination or thrust comes to an end as the use of the model has become decentralized and competence has been spread. Perhaps the innovation team is ready to tackle something else, perhaps they have been yearning to return to a former role of teaching. Or, perhaps, each member of the team is moving out to be a "missionary" in a different part of the system.

2. Celebration

No matter what may be the reason for phasing-out -- loss of budget, successful spread, new interests -- it is important that the team that has put such commitment of time and energy into the effort should have some type of celebration closure. We have an unfortunate tendency to "let things die out" or "keep them going after they are really finished" without any positive private or public expression of satisfaction and celebration. We recommend your team build meaningful celebration into their collaboration.

3. Openness to new models

Educational evaluation is a continuing process. As new insights and capabilities develop, new models of education emerge to modify and replace earlier models. We need to be sure that the innovations of one year do not become the conservative dogma of the next year. It is the purpose of high quality education we are dedicated to, not to any particular model for accomplishing this. Effective change agents must always be ready to be the welcomers of the change efforts of other change agents. The excitement of transfer is another kind of celebration.

RESOURCE BANK

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CONCEPTS, GOALS, STRATEGIES, SKILLS FOR COMMUNITY CHANGE Page 7

A PROBLEM SOLVING PROGRAM Page 7

"SYSTEM APPROACHES TO EDUCATION: DISCUSSION AND ATTEMPTED INTEGRATION. STATE-OF-THE-KNOWLEDGE SERIES, NUMBER 3" PART 3 OF SOCIAL AND TECHNOLOGICAL CHANGE: IMPLICATIONS FOR EDUCATION, DECEMBER 1970 Page 7

"SYSTEM APPROACHES TO EDUCATIONAL PLANNING. STATE-OF-THE-KNOWLEDGE SERIES, NUMBER 4" PART 4 OF SOCIAL AND TECHNOLOGICAL CHANGE: IMPLICATIONS FOR EDUCATION, DECEMBER 1970 Page 7

PEOPLE, GROUPS AND ORGANIZATIONS
Indek and Berrien, eds. (1968)
TC Press, Teachers College, Columbia University, Amsterdam Avenue, N.Y., N.Y. 10017
A basic library reference on organizations.

CHANGING ORGANIZATIONS
Bennes, Warren G.
McGraw-Hill Series in Management
Author's essays on problem of change through various approaches all focusing on causes and consequences of change in organization behavior.

PERSPECTIVES IN ORGANIZATIONAL DEVELOPMENT (1970)
Bowers, David G.
Available from: National Technical Information Service, Operations Division, Springfield, Va. 22151 (AD-711-312, MF $0.95, HC $3.00)
ED 047-251

A statement of problems in the field of organizational development, this report reviews aspects of change practice along with major theoretical implications and formulates a series of researchable questions. It also covers the potential relevance of certain parts of clinical practice and learning theory, including some elements of sensitivity training. Four figures and 13 references are included. (Author/LY)

ORGANIZATIONAL DEVELOPMENT: VALUES, PROCESS AND TECHNOLOGY (1972)
Margulies, Newton; Raia, Anthony P.
Available from: McGraw-Hill Book Company, New York, N. Y.
ED 057-350

The current state-of-the-art of organizatioanl development is the focus of this book. The five parts into which the book is divided are as follows: Part one--Introduction (Organizational Development in Perspective-the nature, values, process and technology of organizational development); Part Two--The Components of Organizational Developments (Key Elements in Organizational Development-planned change, organizational learning, consultation and selected readings); Part Three--The Process and Technology of Organizational Development (The Collection of Data--data gathering, nature of the data, techniques, choosing a method, selected readings; The Diagnostic Phase--diagnosis, selected readings; Intervening the System--planned interventions, conflict and conflict resolution and selected readings; laboratory method and selected readings, team development and selected readings, intergroup building and selected readings and other interventions and selected readings); Part Four--Emerging Issues in Organizational Development (Problems and Challenges in Organizational Development--the need for professionalism, the use of sensitivity training, the use of external and internal consultants, overemphasis on personal-cultural change, limitation to hierarchical systems and selected readings); and Part Five--Case Studies in Organizational Development (The Practice of Organizational Development--some conditions for success and failure). (DB)

ORGANIZATIONAL GROWTH THROUGH DECISION MAKING

Rome and Rome (1971)
American Elsenier Publishing Co., Inc., New York, N.Y.

Reports on the first, large-scale, computer based experiment designed to identify patterns of growth in a complex social organization. Describes the experiments structure, its specific results and the generalizations which can be made from those results.

THE PARABLE OF THE PILL

Becker, Selwyn W. Admin Science Quarter; 15; 1; 94-96 March 1970
EJ 018-211

Critically examines the research on planned change in organization style conducted by R. Golembiewski and S. Carrigan. (LN)

ORGANIZATION DEVELOPMENT AND THE PLANNING INTERFACE (1971)

Croft, John C.
ED 058-608 MF-$0.65 HC-$3.29

Organizational development and planning, two methods currently employed to improve organizations, have a mutual objective -- organization improvement through systematic goal attainment. Organizational development strives to improve administrator behavior to facilitate interpersonal communication between those individuals responsible for the planning activities. Such administrator behavior facilitates a working relationship between those in decisionmaking positions, and maintains a communication process that correctly and efficiently transfers decisions from decisionmakers to decision implementers. (RA)

SELECTED BIBLIOGRAPHY ON SUCCESSION IN COMPLEX ORGANIZATIONS (1967)

Thiemann, Francis C.
ED 017-062 MF-$0.65 HC-$3.29

This document lists 56 journal articles, 18 books, 10 doctoral dissertations and two unpublished papers on succession in complex organizations published between 1948 and 1966. Sociology contributed 40 of the bibliographical entries, history and political science 19, education 16, psychology 7 and business 4. (BM)

NEW PATTERNS OF MANAGEMENT

Likert, Rensis
McGraw-Hill, New York

Written for those actively engaged in management and supervision and concerned with the problems of organizing human resources and activity. Presents System 4 theory of organization.

THE HUMAN ORGANIZATION

Likert, Rensis (1967)
McGraw-Hill, New York

Describes a new system of management based on over 20 years of research at The Institute for Social Research, University of Michigan. Science based management system called System 4.

MANAGING WITH PEOPLE: A MANAGER'S HANDBOOK OF ORGANIZATION DEVELOPMENT METHODS (1971)
Fordyce, Jack K.; Weil, Raymond
Available from: Addison-Wesly Publishing Company, Reading, Massachusetts
ED 047-247

Addressed to managers, students of management and organizational development (OD) practitioners, this handbook concentrates on the joint management of change and presents particular methods that have proved useful in realizing change within business, government, universities and many other institutional settings. Beginning with factors that challenge organizations to change, Part 1 outlines symptoms of organizational health and illness, then offers a definition of OD followed by steps for launching it. Functions and qualifications of a skilled OD arbiter or "third party" are also indicated. Part 2 presents four case studies which trace day to day change processes accomplished by intergroup team building and various other means. Part 3 describes about 30 basic approaches or tools (plus variations) commonly employed in OD to bring about change, collect information, produce better meetings and improve the quality of relationships. An index and 19 references are included. (LY)

THE HUMAN SIDE OF ENTERPRISE
THE PROFESSIONAL MANAGER
McGregor, Douglas
McGraw-Hill Book Company

1) Policies and practices in the management of human resources, examining them in the light of social science knowledge about human nature and behavior.
2) Links some of the main concepts of Human Side of Enterprise to the basic concepts of the behavioral sciences while developing methodologies for changing organizations along line specified in the earlier text.

ORGANIZATION RENEWAL: ACHIEVING VIABILITY IN A CHANGING WORLD (1969)
Lippitt, Gordon L.
Available from: Appleton-Centur-Crofts, Educational Division, Meredith Corporation, 440 Park Avenue South, New York, N.Y. 10016
ED 037-663

Drawing on behavioral and management science, this book points out the necessity for organizations to re-examine their objectives on behalf of their members, clients and employees. Part One covers organizations as Socio-technical systems; Part Two discusses organizations as people at work (motivation, personality, leadership and work groups); and, Part Three covers the process of interfacing (dialogue, confrontation, problem solving and ethical implications). Parts Four and Five cover conditions, skills and actions in organizational renewal and resources for it. (NL)

LABORATORY TRAINING AND ORGANIZATION DEVELOPMENT
Buchanan, Paul C. Admin Science Quarter; 14; 3; 466-480, September 1969.
EJ 014-020

Reviews studies published between 1964-1968 on laboratory training in human relations and its use and relationship to the improvement of organizational effectiveness. (LN)

CHANGE IN SCHOOL SYSTEMS (1967)

Watson, Goodwin, ed.

Available from: NTL Learning Resources Corporation, 2821 Dorr Avenue, Fairfax, Virginia 22116 ($3.75)

Two volumes on organizational change with specific applications for the field of education. Published for the Cooperative Project for Educational Development.

STRUCTURING THE ADMINISTRATIVE ORGANIZATION OF LOCAL SCHOOL SYSTEMS. EDUCATIONAL RESEARCH SERVICE CIRCULAR NO. 2

Available from: Educational Research Service, Box 5, NEA Building, 1201 16th Street, N.W., Washington, D. C. 20036 ($2.00)

ED 042-236 MF-$0.65 HC Not Available from EDRS

This paper is intended to assist school administrators in improving existing school organization. It discusses the nature of organizations, provides indicators of reorganization timing, and discusses the task of reorganization. A matrix chart, used to analyze and compare different organizational structures is provided with explanations. Flowcharts for 15 different types of school administrative structures are provided and explained. A 25 entry bibliography is included. (DE)

PLANNED ORGANIZATIONAL CHANGE: A STUDY IN CHANGE DYNAMICS (1969)

Jones, Garth N.

Available from: Routledge and Kegan Paul, Ltc., Broadway House, 68-74 Carter Lane, London E.C.4, England (L2)

ED 034-923

This study attempts to develop a broad model or concept, based largely on empirical evidence, which applies social science knowledge and methodology to the planning of change in corporations, armies, schools, hospitals, government, community groups and other formal and informal organizations. Chapters 2, 3, and 4 define and discuss the roles of change agents, change catalysts, and "pacemakers" (Maintainers of change) in stimulating and guiding organizational change. Other chapters examine theories and empirical findings on organizations as client systems, strategies and tactics of change, and the problem of determining and analyzing goals. Finally, the state of the art of planning organizational change is assessed and several problems unmet in this study are indicated. The document includes bibliographies and indexes, 34 tables and figures, 17 graphs, proposed subject and geographic classification schemes and instructions for case analysis. (LY)

CONTRASTS IN THE PROCESS OF PLANNED CHANGE OF THE SCHOOL'S INSTRUCTURAL ORGANIZATION

Charters, W. W., et. al.

AERA Presentation (3-73)

One of several reports of a program of research initiated in 197 by Program 20 of the Center for Advanced Study of Educational Administration, University of Oregon and are concerned with the implementation phase of educational innovation.

1) Observational case studies
   differentiated staffing
2) Case studies of elementary schools that reputedly had succeeded in implementing the multiunit school model developed by the University of Wisconsin Research and Development Center for Cognitive

ERIC ABSTRACTS: A COLLECTION OF ERIC DOCUMENT RESUMES ON ORGANIZATIONAL RENEWAL: CHANGE AND THE SCHOOL ADMINISTRATOR. ERIC ABSTRACTS SERIES, NUMBER EIGHTEEN (1971)

American Association of School Administrators, Washington, D. C.; Oregon University, Eugene. ERIC Clearinghouse on Educational Administration.

Available from: American Association of School Administrators, 1201 16th St., N.W., Washington, D. C. 20036 ($2.00, quantity discounts)

ED 048-665 EDRS Price MF-$0.65 HC-$3.29

The following information is presented for each document: Author, title, place of publication, publisher, publication date, number of pages, ERIC document ("ED") number, price and availability and abstract. A subject index is cross-referenced with the document listing. (RA)

PROBLEMS OF IMPLEMENTING ORGANIZATIONAL CHANGE IN THE ELEMENTARY SCHOOL: A CASE STUDY (1972)

Reynolds, Larry

ED 062-716 EDRS Price MF-$0.65 HC-$3.29

Paper presented at AERA Annual Meeting (57th, Chicago, Ill., April 3-7, 1972)

Summary of study completed at Center for Advanced Study of Education Administration, University of Oregon (Unpublished Ph.D. Dissertation, U. of O., 1972)

The attempts of an elementary school to implement innovative staffing and curriculum changes. Staff reorganization included a move away from self-contained classrooms, the restructuring of the role hierarchy, an increase in staff, some changes in role differentiation and a re-allocation of major decisionmaking responsibilities. Curriculum changes involved the institution of a program to improve the quality and quantity of arts instruction. However, these proposed changes were only partially implemented, and many of the characteristics of the previous instructional organization and curriculum were retained. Some of the major impediments to the implementation of the proposed changes included the norm of teacher autonomy, the inability of the staff to reach consensus relative to the group decision-making processes and a lack of clarity with regard to instructional change. (Author/RA)

CHANGING SCHOOLS: CASE STUDIES OF CHANGE-AGENT TEAMS IN THREE SCHOOL SYSTEMS. A REPORT FROM THE PROJECT ON MODELS FOR EFFECTING PLANNED EDUCATIONAL CHANGE. (1971)

Goodson, Max R.; Hagstrom, Warren O.

ED 058-664

An approach to school system change--the establishment of a change agent team to plan for and manage specific changes and to facilitate and perpetuate an innovative climate. It presents case studies of change agent teams in three Wisconsin school systems. A model for change agent team planning and action -- problem diagnosis, strategy planning, strategy activation, and result evaluation -- is described. The activities of the teams and their colleagues are related and an evaluation of the interventions based on systematic data is included. (Author)

THE EDUCATIONAL PARK, THE MIDDLE SCHOOL--A REPORT ON MATERIAL ON FILE IN THE BERKELEY UNIFIED SCHOOL DISTRICT RESEARCH OFFICE AND SOME ADDITIONAL SOURCES FROM THE BERKELEY SCHOOLS' PROFESSIONAL LIBRARY. (TITLE SUPPLIED) (1966)

Dunn, Susan V.
ED 011-127 MF-$0.65 HC-$3.29

A review of literature outlining the main advantages and disadvantages of educational parks and middle schools is presented. Educational parks are distinguished by their large size (from 10,000 to 25,000 students), central location, administrative centralization and decentralized school design. The advantages of educational parks include (1) a partial solution to de facto segregation, (2) reduction in the cost and complexity of educational facilities, and (3) better accommodation of local population shifts. Disadvantages include (1) large size, (2) impersonal atmosphere, (3) tighter administrative control, and (4) cost of transporting students from neighborhood schools. Values of the middle school (grades 5 or 6 through 8) include (1) improved transition from elementary to high school, (2) a specially designed program to fit the needs of preadolescents, and (3) promotion of integration by drawing students from a larger attendance area. Annotated bibliographies provide publication information on educational parks and middle schools. (PP)

OPEN EDUCATION: PROMISE AND PROBLEMS. FASTBACK SERIES, NO. 3.

Perrone, Vito
Available from: Phi Delta Kappa, 8th & Union, Box 789, Bloomington, Indiana 47401. (Individual fastback, $.50 prepaid; set of six, $2.00; quantity and membership discounts.
ED 062-726

The term "Open Education" is used to designate the curriculum and instruction methods associated with an open plan school -- one without interior walls. Such a program consists of more advanced children assisting those less advanced, independent study, children progressing at their own rate, extensive use of the outdoor environment, child-initiated activities, integrated curriculums and teachers functioning as guides and as facilitators of learning. Under such a plan, highly structured curriculums and uniform instructional materials have no place. The emphasis is on learning and any resource that stimulates the interest of the student becomes a legitimate field of inquiry. Among the problems of open education are (1) the need for time, (2) some minimal structure to insure continuity in subsequent years, and (3) the need for teaching and administrative personnel with experience in open education. This booklet focuses on the elementary school as open education is being practiced more extensively at that level. (RA)

ADMINISTERING THE NONGRADED SCHOOL (1967)

Splawn, Robert E.; Stoker, W. M.
ED 016-283 MF-$0.65 HC-$3.29

Adoption of the nongraded system for elementary and secondary schools necessitates extensive changes for both the school system and the community. A set of administrative guidelines is proposed for the implementation of the nongraded system and the role of the administrator is examined in relation to (1) program development, (2) teacher and community cooperation, and (3) student evaluation and placement. (DG)

CONCEPTS, GOALS, STRATEGIES, SKILLS FOR COMMUNITY CHANGE (1972)
Lippitt, Ronald and Rainman, Eva Schindler
Available from: NTL Learning Resources Corporation, 2821 Dorr Avenue, Fairfax Virginia 22116 (Price $2.50 - Order #1201-10)

An outgrowth of an experimental program of the Extension Department of the University of California, Riverside, this workbook tells how black, brown and white people became better informed about their history and current status and how they developed models, strategies and programs to have impact both on the systems in which they worked and on their community.

A PROBLEM SOLVING PROGRAM
Available from: NTL Learning Resources Corporation, 2821 Dorr Avenue, Fairfax, Virginia 22116 (Price $7.50 - Order #1209-00)

This packet of 20 identical workbooks guides the user through the force field analysis method of problem solving.

"SYSTEM APPROACHES TO EDUCATION: DISCUSSION AND ATTEMPTED INTEGRATION. STATE-OF-THE-KNOWLEDGE SERIES, NUMBER 3" PART 3 OF SOCIAL AND TECHNOLOGICAL CHANGE: IMPLICATIONS FOR EDUCATION, DECEMBER 1970.
Kaufman, Roger A.
ED 049-562 (The complete document, Parts 1-5 is available as ED 044-833)

The third paper defines a system approach as the application of formal problem-solving tools and techniques for effectively and efficiently achieving a desired outcome based on documented needs. The author proposes a six-step model integrating a number of techniques for the improvement of educational outcomes.

"SYSTEM APPROACHES TO EDUCATIONAL PLANNING. STATE-OF-THE-KNOWLEDGE SERIES, NUMBER 4" PART 4 OF SOCIAL AND TECHNOLOGICAL CHANGE: IMPLICATIONS FOR EDUCATION, DECEMBER 1970.
Alkin, Marvin C. and Bruno, James E.
ED 049-563 (The complete document, Parts 1-5 is available as ED 044-833)

Part 4 discusses applications of systems approaches to educational planning. The authors review various systems planning techniques: operations research, planning-programming-budgeting systems, systems analysis, simulations, operational gaming, Delphi technique, program evaluation review technique and critical path method.

PROCESS OF CHANGE
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THE EDUCATIONAL RESOURCES INFORMATION CENTER: AN AGENT OF CHANGE Page 4

SELECTED AND ANNOTATED BIBLIOGRAPHY ON THE PROCESS OF CHANGE (1966)
Karland, N. and Miller, R.
New York State Education Department and the University of Kentucky

CHANGE OR REVOLUTION (1971)
Sullivan, E. D., ed.
Institute of Life Insurance, 277 Park Avenue, New York, New York 10017

An analysis of interactive social forces. Examines major social forces contributing to fundamental changes, particularly in the areas of education, business, government, arts, letters and ideas.

THE CHANGE PROCESS IN EDUCATION: A SELECTED AND ANNOTATED BIBLIOGRAPHY. FINAL REPORT
ED 041-108
Bibliography Series, No. 5, 1970.

This effort was designed to identify literature which might reveal alternatives for managing changes as it occurs in man's social, techical and occupational environment. The bibliography was compiled for use by researchers interested in studying the change process. The bibliography is selective rather than inclusive.

THE PROCESS AND EFFECTS OF MASS COMMUNICATION. REVISED EDITION. (1971)
Schramm, Wilbur, Ed.; Roberts, Donald F., Ed.
Stanford University, California Institute for Communication Research.
Available from University of Illinois Press, Urbana, Illinois 61801
ED 062-760 ($15.00)

Composed of a mixture of old classics, new classics, reports on state of the art in important areas, and speculations about the future, this second edition of the reader in communication research provides an introduction to questions about how communication works and what id does. Papers by prominent researchers and writers in the field comprise the chapters and areas covered are divided into two major sections: the nature of communication between humans and the nature of communication effects!

COMMUNICATION AND SOCIAL CHANGE (1971)
Westley, Bruce H. American Behavioral Scientist; 14; 5; 719-743
EJ 041-644

Where the traditional view urges the study of what content through what channels will produce what effects on what audiences, we should be studying how societies process information. (Author/MB)

SOCIAL AND TECHNOLOGICAL CHANGE. IMPLICATIONS FOR EDUCATION (1970)
Piele, Philip K. and others, eds.
Research in Education, 1971.
ED 044-833 MF-$0.65 HC-$13.16
Also available: Publications Department, Center for Advanced Study of Educational Administration, Hendricks Hall, University of Oregon, Eugene, Oregon 97403 $.75

The five conference papers are: (1) The Nature of Our Changing Society: Implications for Schools. (2) Teacher Militancy: Implications for the Schools. (3) System Approaches to Education: Discussion and Attempted Integration. (4) System Approaches to Educational Planning, and (5) Educational Management Information Systems: Progress and Prospectives.

DELIBERATE SOCIAL CHANGE IN THE CITY: LIST OF SUGGESTED READINGS. (1972)

Duhl, Leonard; Schon, Donald A.
Available from: The Council of Planning Librarians, Post Office Box 229,
Monticello, Illinois 61856 ($1.50)
ED 062-622 MF-$0.65 HC-$3.29

The suggested readings in this occasionally annotated bibliography contain the following subject areas: (1) The Scope of "Social Change"; (2) Toward a Theory of Social Change; (3) A. The Rational Problem Solving Process, B. Behavioral Approaches to Social Change; Functional Analysis, C. Social Change as Socio-Political Conflict, D. Systems Analysis and Institutional Factors in Change, E. Non-deliberate Approaches to Social Change; (4) A. Influencing the Emergence of Ideas in Good Currency, B. Effecting Shifts in Institutional Policy, C. Instituting Programs from a Central Administrative Base, D. Maneuvering Among Existing Institutions, E. Designing and Bringing into Being a new Institution, F. Changing an Existing Institutional System from Within, G. Changing an Existing Institutional System from Outside; and, (5) A. Description and Theory of Social Change, B. Nature of Social Change Processes, C. Interaction Between the Change Agent and His Environment, D. Normative Questions: Values and Ethics. In addition, nine books that are recommended for purchase are listed. (DB)

ORGANIZATIONAL CHANGE PROCESSES: A BIBLIOGRAPHY WITH COMMENTARY. (1970)

Baldridge, J. Victor
ED 036-908 MF-$0.65 HC-$3.29

This bibliography deals with a wide variety of organizational dynamics and is related to the definition of organizational change developed by the Stanford Center's Organizational Change project. This definition, discussed in detail, focuses on deliberate change instituted to reformulate official policy. A topical outline of the bibliography is provided. Included under the heading "General Problems of Analyzing Organizational Change" are discussions of (1) reasons why organizational theoriests have generally neglected the problem of organizational paradigms, (2) deliberate action by authorities and partisans, (3) organizational conflict as a promoter of change, and (4) the interrelation of organizational subsystems. Included under the heading "Changes in Various Subsystems" are discussions of (1) changing organizations by changing individuals, (2) partisan groups of agents of organizational change, (3) system changes planned by authorities (long-range planning and decision-making), (4) technology as a source of organizational change, and (5) the organization and its environment. (DE)

RESISTANCE TO CHANGE (1971)

Watson, Goodwin; American Behavioral Scientist; 14; 5; 745-766 May 1971.
EJ 041-645

If people and organizations do not change, it must be because the natural drives toward innovation are being stifled or held in check by countervailing forces. Factors within personality and social systems which resist change are examined and recommendations for neutralizing or transforming these factors are summarized. (Author/MB).

ON THE NATURE OF INNOVATIONS (1971)

Zaltman, Gerald; Lin, Nan; American Behavioral Scientist; 14; 5; 651-673 May, 71
EJ 041-641

The basic dynamic core of social change, the adoption and diffusion processes, evolves around an innovation. The tendency to adopt an innovation related to communicability of the innovation, its compatibility with other practices, its publicness and the reversibility of its effects. (Author)

GUIDE TO INNOVATION IN EDUCATION (1970)

Havelock, R. G.
Institute for Social Research, Center for Research on Utilization of Scientific Knowledge, University of Michigan, Ann Arbor, Michigan.

A guide to the process of innovation. This book is written for educators who are working for reform at all levels. It provides a great deal of information on how successful innovation takes place and how change agents can organize their work -- an easy reference in the planning and day-to-day management of change. Also lists four change agent case histories and their innovations, discusses the stages of planned change. Appendix B lists, describes and gives addresses of major information sources in education. (See People and Places for further information.)

INNOVATION IN EDUCATION (1964)

Miles, M. B., ed.
T C Press, Teachers College, Columbia University, Amsterdam Avenue, New York, New York 10017

A wide variety of pertinent cases and careful consideration of innovative processes and change procedures drawn together in one compendium.

A STUDY OF INNOVATION AND CHANGE IN EDUCATION.

The Regional University-Schools Research and Development Program. An Action-Research Project, 1967-1971.
Schlesser, George E. and others
Available from: Office of Educational Research, Colgate University, Hamilton, New York 13346 ($3.00)
ED 058 638 MF-$0.65 HC-Not Available from EDRS

This [illegible] year study attempted to design a program that would provide the optimum conditions necessary for schools, universities and other agencies to try new practices and study their quality through research and evaluation; and in which creative, innovative teachers would be supported rather than frustrated. Innovations were introduced as effectively as possible in 26 schools; and the impact on the schools, the community, and on regional agencies was studied. The report is divided into (1) action and (2) research. The first section traces the project planning and operation from the time teachers introduced new practices until the regional model was conceived. The research section presents findings on the forces at work in the schools and in the community. (Author).

PROCEDURES FOR MANAGING INNOVATIONS. ANALYSIS OF LITERATURE AND SELECTED BIBLIOGRAPHY.
Analysis and Bibliography Series, Number 7. September 1970. (Bibliography)
Research in Education - February 1971.
ED 043-116 MF-$0.65 HC-$3.29

The review analyzes current evidence on how local schools identify, judge, install, evaluate and maintain innovations, discusses facilitators and inhibitors of innovation in schools and assesses unmet needs in assisting schools in the adoption and installation of innovations. A 78 item bibliography is included.

MANAGING PROJECTS AND PROGRAMS
Harvard Business Review, Soldiers Field, Boston, Massachusetts 02163

15 articles on organization, leadership, planning, with a preface on themes and applications.

PLANNING, PT. III
Harvard Business Review, Soldiers Field, Boston, Massachusetts 02163

16 analyses dealing with the role of planners, entrepreneurial thinking and functional planning.

MODELS FOR RATIONAL DECISION MAKING. ANALYSIS OF LITERATURE AND SELECTED BIBLIOGRAPHY.
Analysis and Bibliography Series, Number 6. September 1970.
Hall, John S.
Research in Education - February 1971
ED 043-115 MF-$0.65 HC-$3.29

The analysis focuses on current or developing decision-making models and strategies in education and evidence of their effectiveness, and existing or possible alternative models of authority systems and decision processes in schools. A 54 item bibliography is included.

BIBLIOGRAPHY OF RESEARCH ON THE DIFFUSION OF INNOVATIONS (1968)
Department of Communications, Michigan State University, East Lansing, Mich.

BIBLIOGRAPHY ON KNOWLEDGE UTILIZATION AND DISSEMINATION (1968)
Havelock, R. G.
Institute for Social Research, Center for Utilization of Science Knowledge, University of Michigan, Ann Arbor, Michigan

4000 references compiled for the purpose of identifying and reviewing literature relevant to the topic: "Utilization and Dissemination in all Fields of Knowledge." Section V - Bibliography 1967-1969; Section VI - Supplement Items Entered After 1972.

THE EDUCATIONAL RESOURCES INFORMATION CENTER: AN AGENT OF CHANGE
Mathies, Lorraine
J Educational Data Process; 7; 2; 123-129 April 1970
EJ 022-893

Discusses the products of the ERIC system and the agency-of-change character of ERIC in its roles of information control, analysis and dissemination. (DE)

ROLE CHANGE
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LEADERSHIP, PT. II
Harvard Business Review
Soldiers Field, Boston, Massachusetts

12 articles. Top executives and educational leaders discuss ways of building more effective teamwork.

NEW SETS OF JOBS FOR SCHOOL PERSONNEL. ANALYSIS OF LITERATURE AND SELECTED BIBLIOGRAPHY.
Analysis and Bibliography Series, Number 3; September 1970.
Piele, Philip K.
ED 043-112 MF-$0.65 HC-$3.29

An analysis of the trend toward differentiation of elementary and secondary school instructional staffs to involve teacher aides, technical assistants, clerical assistants and staff specialists in addition to professional teachers redefines professional and nonprofessional roles. A 96 item bibliography is included.

FOSTERING AND REINFORCING INNOVATIVE BEHAVIOR IN SELECTED SCHOOL PERSONNEL, A MONOGRAPH OF SELECTED PAPERS PRESENTED AT TWO INSTITUTES (TUCSON, SUMMER AND FALL, 1966)
Smith, David Wayne
Southwestern Cooperative Educational Lab., Albuquerque, New Mexico
ED 013-683 MF-$0.65 HC-$3.29

Presented are a selected group of papers chosen from those given at two institutes on fostering and reinforcing innovative behavior in selected school personnel. The topics presented include: (1) the value of research in the classroom, (2) the necessity for teachers to be innovative, (3) the factors related to academic achievement, (4) the use of programed material in the classroom, (5) the need for schools and teachers to have specific objectives, and (6) the necessity for innovation and evaluation when applying for funds under the elementary and secondary education act. Some bibliographical references are included with the papers. (ES)

SOCIAL CHANGE AND TEACHER EDUCATION: AN ANNOTATED BIBLIOGRAPHY (August 1970)
Mathieson, Moira B. and Tatis, Rita M.
ED 043-558 MF-$0.65 HC-$3.29

Annotated bibliography of 137 published and unpublished documents, the majority of them dated between 1967 and 1969. Included are research reports, program descriptors, addresses, articles and conference papers.

INSERVICE EDUCATION -- PSYCHOLOGICAL PERSPECTIVES (1967)
Asher, James J.
Far West Lab. for Educational Research and Development, Berkeley, California
ED 015-891 MF-$0.65 HC-$3.29

This report summarizes and evaluates literature and research dealing with the psychological settings for behavioral change with relevance for inservice teacher education. It was designed to provide a basis for decision making by the professional staff of the Far West Laboratory in Berkeley, California. It contains sections dealing with (1) The History of Inservice Education, (2) The Ideal Goals of Inservice Training, (3) Analysis of Inservice Programs which have been Tried, (4) "The Acceptance of Innovation," Which Explores the Question of Resistance to New Ideas Among School Personnel, (5) How Inservice Programs should be Evaluated, (6) Future Inservice Programs, and (7) Recommendations for Improving Programs, Teachers, the Physical Setting, Evaluation Methods and Research (AW)

TRADE AND INDUSTRIAL TEACHER EDUCATION, REPORT OF A NATIONAL INVITATIONAL RESEARCH PLANNING CONFERENCE (OHIO STATE UNIVERSITY, MAY 23-27, 1966).
Cotrell, Calvin J.
Ohio State University, Columbus, Ohio. Center for Vocational and Technical Education.
ED 011-043 MF-$0.65 HC-$6.58

National leaders were brought together to focus their attention on the generation of guidelines for research and development programs to expand and improve trade and industrial teacher education. To provide background information and to stimulate thinking, several papers were commissioned and presented. These papers included: (1) "A Review of Research in Trade and Industrial Teacher Education," (2) "Report of Analysis of Sources of Trade and Industrial Teachers," (3) "Analysis of Trade and Industrial Teacher Education Professional Literature," (4) "Development of Technical Training, Teacher training and School Administration Procedures in the U. S. Navy," (5) "Television Recordings - A New Dimension in Teacher Education," (6) "A Cursory Study of Innovations in Trade-Technical Teacher Education in the United States," (7) "Implications of Computerized Instruction," (8) "The Development of Training Lessons for Pre-Service and Initial-In-Service Vocational Teacher Education Recorded and Presented Through Video Tape and Television with Seminar Sessions," and (10) "Projections for Trade and Industrial Teacher Education." (EM)

A SELECTED BIBLIOGRAPHY ON EVALUATION OF MANAGEMENT TRAINING AND DEVELOPMENT PROGRAMS
Kohn, Vera, Comp. (1969)
American Foundation for Management Research, Inc., Hamilton, New York
ED 034-947 MF-$0.65 HC-$3.29

This bibliography (largely annotated) on management development and training contains 61 items published between 1959 and early 1969. Citations have been grouped into five categories: descriptions of research studies; literature reviews; discussion of evaluation techniques; surveys of corporate practices; and books (eight references). Such aspects as participant satisfaction, interpersonal competence, sensitivity and human relations training, program planning, behavior and attitude change, reinforcement and the Management Grid approach are represented. Topics not covered include evaluation of undergraduate management courses or manager training programs conducted under university auspices; assessments of programed instruction as a management development technique; and, military research. An author index and a list of periodicals are included. (LY)

THE USE OF EDUCATIONAL PARAPROFESSIONALS: A SELECTED ANNOTATED BIBLIOGRAPHY (1972)
Michael, Elizabeth B., Comp.
Available from: College of Education Curriculum Laboratory, University of Illinois, 1210 W. Springfield Avenue, Urbana, Illinois 61801 ($0.35)
ED 059-785 MF-$0.65 HC-$3.29

This document is an annotated bibliography containing 100 entries on works dealing with the use of the educational paraprofessional. (CK)

KNOWLEDGE PRODUCTION AND UTILIZATION IN EDUCATIONAL ADMINISTRATION
Eidell and Ketchel, eds. (1968)
University Council for Education Administration, Columbus, Ohio
Center for Advanced Study of Education Administration, University of Oregon

Collection of papers presented at Career Development Seminar. Papers examine various facets of problems inherent in the application of knowledge to practice.

THE PUBLIC SCHOOL PRINCIPAL AS THE CHANGE AGENT IN THE DESEGREGATION/INTEGRATION PROCESS.
Turnage, Martha (1971)
Paper presented at the Southern Sociological Society Meeting, Miami, Fla. (May 6, 1971)
ED 059-318 MF-$0.65 HC-$3.29

After a school district is desegregated, what factors determine whether the individual school becomes a harmonious entity with full acceptance of both races, or simply another resegregated school where blacks and whites coexist uneasily? This study attempts to demonstrate that in a school's alteration from segregation to desegregation, the administrative position most centrally involved in the institutionalization of this social change is its chief administrative officer -- the public school principal. From an exploratory pilot study of 17 principals and assistance principals conducted in York County, Virginia, in the spring and summer of 1969, a questionnaire was developed to probe three dimensions of the principal's role in desegregation. During the winter 1970, a statewide questionnaire survey of all principals of Virginia high schools, junior highs and combined schools was conducted. Of the 431 questionnaires mailed, 312 were returned in a manner acceptable for survey data. Findings are grouped in three areas: the principal's influence in the community, the principal as change agent in the school and the principal's power status in the school system. These findings lead to the conclusion that desegregation is redefining the role of the principal. (Author/IM)

SEMINAR SERIES FOR SCHOOL ADMINISTRATORS. VOLUME 2, CHANGE AND INNOVATION (1968)
Carson, Robert B., Ed.
Available from: Department of Educational Administration, The University of Calgary, Calgary 44, Alberta, Canada ($3.00)
ED 025-016

Six papers presented on separate occasions to practicing administrators deals with the general topic of the implementation and consequences of change in an organization. The authors and titles of the papers are:

(1) A. V. Piggott, "Educating for Tomorrow's Needs," (2) T. C. Byrne, "Research and Decision Making," (3) Keith Goldhammer, "Research Points the Way," (4) R. J. Pellegrin, "Educational Organizations and Problems of Innovation," (5) J. E. Cheal, "Uniting the Art and Science of Administration, and (6) R. B. Carson and F. D. Oliva, "Issue Analysis: Implications for Administration." Also included is a 19 item annotated bibliography. (HW)

ADMINISTRATIVE PERFORMANCE AND PERSONALITY (1962)
Kemphill, Griffiths and Frederiksen
TC Press, Teachers College, Columbia University, New York and London
A study of the principal in a simulated school.

HUMAN BEHAVIOR
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GUIDE TO THE CONCEPT: CONFLICT, REVISED EDITION. Page 3

CONFLICT MANAGEMENT IN EDUCATION. ERIC/CEM RESEARCH REVIEW Page 4

A BIBLIOGRAPHY (1969)
Burgess, Bonita G., Comp.
Philadelphia School District, Pa.
ED 049-118 MF-$0.65 HC-$3.29

This bibliography was compiled for a human development curriculum. The materials pertain to both children and adults and are intended for both teachers and students. The categories are: printed works, films, filmstrips, photographs, records and centers which produce instructional materials. In addition, a classification system is used for such topics as: Man's Curiosity About His World, Search for Meaning in Life, Man's Feelings About Himself, Man's Concern for Others, Man's Generations and Their Relationships, The World of Work and Social Roles. (CWB)

MEASURING HUMAN BEHAVIOR
Lake, Miles and Earle, ed(s)
TC Press (1973)
Teachers College, Columbia University, New York and London

Brings together 84 different instruments useful as tools for measuring social functioning. Also presents reviews of 20 other existing compendia of instruments and what the adequacy of information presented in them is.

LIFE AT AN EARLY AGE: NOURISHING SELF-CONCEPT IN THE CLASSROOM.
Elementary English, v47, pp. 993-1001, November 1970.
Harvey, Robert C. and Denby, Robert V.

This interpretive summary reviews current literature on the nature and importance of self-image enhancement and then describes several ERIC documents that discuss the problem and/or give guidance on the development of programs to aid in self-image enhancement.

HUMANITIES IN THE CLASSROOM (1971)
Poli, Rosario, Comp.
Available from: Association Referral Information Service (ARIS), Ohio; Education Association, Columbus, Ohio (Single Copy, Free)
ED 056-965 MF-$0.65 HC-$3.29

One of eighteen in a series, this annotated bibliography includes 64 publications that deal with the humanities and humanizing formal instruction at all instructional levels. Citations include recent ERIC documents, journal articles and books. (DJB)

TEACHING FOR PERSONAL GROWTH: AN INTRODUCTION TO NEW MATERIALS
Borton, Terry Ment Hyg; 53; 4; 594-599 October 1969
EJ 008-705

20 EXERCISES FOR THE CLASSROOM
Albertson, D. Richard and Hannan, Cecil J. (1972)
Available from: NTL Learning Resources Corporation, 2821 Dorr Ave., Fairfax, Virginia 22116 - Price $3.75, Order #1209-02

This adaptation of "Interaction Briefs" from Today's Education, the journal of the National Education Association, is a second exercise packet to bring human interaction exercises to teachers at the elementary and secondary school levels.

ON HUMANIZING TEACHER-PUPIL RELATIONS

Elementary English, v47, pp. 1121-1134, December 1970
Harvey, Robert C. and Denby, Robert V.

This interpretive summary reviews current literature on the need for human relations training for teachers and on the nature of various kinds of human relations activities (including "sensitivity training") and describes several ERIC documents that can guide the development of human relations activities for language arts teachers.

REFERENCES TO TEACHING CHILDREN ABOUT HUMAN BEHAVIOR: PRE-HIGH SCHOOL (1970)

Roen, Sheldon R.
ED 066-411 MF-$0.65 HC-$3.29

This bibliography lists approximately four hundred publications on the teaching of behavioral sciences to elementary and intermediate grade children. Although entries date from 1932 to 1970, emphasis is upon recent works of journal articles, books, newsletters, papers, reports, dissertations and government publications. Six major sections are arranged according to type into: 1) Directly Relevant References; 2) Other Literature Resources for Teachers; 3) Selected Curriculum and Teaching Materials; 4) Children's Books and Texts; 5) High School Psychology; and, 6) Survey of Projects with Addendum. Sections three through five are annotated. Within each section, alphabetically arranged author entries contain complete bibliographic information. (SJM)

TEACHING OF PSYCHOLOGY IN THE SECONDARY SCHOOL: RESEARCH STUDIES 1964-1971; TEACHING OF THE BEHAVIORAL SCIENCES IN THE ELEMENTARY SCHOOL. SELECTED BIBLIOGRAPHIES.

Available from: American Psychological Association Clearinghouse on Pre-College
Psychology, 1200 17th Street, N.W., Washington, D.C. 20036
(single copy only)
ED 052-074 MF-$0.65 HC-$3.29

Two bibliographies are now available on precollege psychology. The first lists 24 recent publications on the teaching of psychology at the secondary level. Entries include journal articles, research reports, newsletters, scholarly papers, doctoral dissertations and government publications. The other bibliography cites 115 references on the teaching of the behavioral sciences in elementary schools. Book entries on this topic are given as well as journal citations and research publications. (Author/JSB)

PROGRAM ON THE TEACHING OF PSYCHOLOGY IN THE SECONDARY SCHOOL. FINAL REPORT (1970)

Available from: American Psychological Association, 1200 17th Street, N.W.,
Washington, D. C. 20036 ($2.00; Quantity Discounts)
ED 045-542 MF-$0.65 HC-$6.58

A source book for teachers of psychology, particulary at the high school level. Included are: 1) reviews of tests, readings books, and laboratory manuals; 2) descriptions of journals; 3) a catalogue of audiovisual materials; 4) a listing of source materials fro the teacher; 5) a listing of suppliers of equipment and animals; 6) a listing of popular collateral books; 7) the addresses of national organizations from which materials for instruction can be obtained; 8) a sampling of some methodological successes used by the program members in their teaching; and, 9) some suggestions of ways to organize a first course in psychology. (SBE)

HUMAN RELATIONS - TRAINING AND RESEARCH, NUMBER 1. CURRENT INFORMATION SOURCES, NUMBER 10. (1968)

Syracuse University, New York, ERIC Clearinghouse on Adult Education
ED 016-159 MF-$0.65 HC-$3.29

This annotated bibliography presents 36 citations of the more current literature on human relations training and research, most of them with abstracts. The abstracts have been grouped as research and research reviews, monographs and reports and journal articles. The documents are mostly dated 1966 and 1967. (PT)

A BIBLIOGRAPHY OF RESEARCH. EXPLORATIONS, HUMAN RELATIONS TRAINING AND RESEARCH, NUMBER 2 (1967)

Durham, Lewis E. and others
National Training Labs. Institute for Applied Behavioral Science, Washington, D.C.
ED 014-016 MF-$0.65 HC-$3.29

This bibliography of research in human relations training is presented in two sections. The first part includes an annotated bibliography of research conducted between 1947 and 1960. It was prepared by Lewis E. Durham and Jack R. Gibb and contains 48 citations. The second part, prepared by Eric S. Knowles, includes research since 1960. It includes a bibliography of 76 citations and an annotated bibliography of 52 studies. Subject areas covered include T-groups, group structure and dynamics, interpersonal relationship and competence, self concept, personality change, behavior and attitude change and organizational change. (PT)

CREATIVITY, A SELECTIVE REVIEW OF RESEARCH (1971)

Freeman, James And Others
Available from: Society for Research into Higher Education Ltd., 20 Gower Street, London, WC1 ($6.60)
ED 058-818

A study of developments in the creativity field. The major topics include: (1) creativity as related to intelligence and personality; (2) the structure of intellect; (3) research into convergent and divergent thinking; (4) educational factors in creativity; (5) creativity and enviornment; and (6) current trends in creativity research. A list of references and a bibliography are included. (HS)

GUIDE TO THE CONCEPT: CONFLICT, REVISED EDITION (1971)

Diablo Valley Education Project, Orinda, California; New York Friends Group, Inc., New York. Center for War/Peace Studies
ED 059-112 MF-$0.65 HC-$3.29

The concept of conflict provides a rich tool for teachers to analyze much of human behavior. When applied intelligently, it can bridge the gap between very personal conflict situations and those remote conflicts occurring between nation states. Its study can also help teachers to manage the conflicts lying just beneath the surface of his classes. There are hundreds of ideas about conflict which can be examined in thousands of human events. Knowing that the reader will think of the many applications, the chief focus here is on the ideas. First, a definitional statement about conflict is presented; one which encompasses a wide range of human behavior. Suggested also are several cognitive objectives and some desirable attitudes toward conflict which you may want to develop in your students. A tentative model of the process of conflict and its resolution is offered and ways of using this model as a basis for student activities are suggested. Finally, some other student activities are described which can provide some practical experience in recognizing and resolving conflicts. (Author/JLB)

CONFLICT MANAGEMENT IN EDUCATION. ERIC/CEM RESEARCH REVIEW (1971)
Piele, Phillip K.
Oregon University, Eugene. Center for Advanced Study of Educational Administration; Oregon University, Eugene. ERIC Clearinghouse on Educational Management.
ED 058-650 MF-$0.65 HC-$3.29

This review focuses on conflict management. Such management seeks and uses ways to understand and deal with the differing opinions, needs and ideas that are a part of the contemporary school. The documents reviewed discuss such issues as (1) the conflicting perceptions of administrators and teachers, (2) the operational procedures of school boards in relation to community resources and (3) the interracial conflict in urban schools. (Author)

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BIBLIOGRAPHY ON CURRICULUM DEVELOPMENT (1966)

Harvard University, Cambridge, Massachusetts. Graduate School of Education
ED 011-312 MF-$0.65 HC-$3.29

This bibliography lists materials on various aspects of curriculum development. Forty unannotated references are provided for documents dated from 1960 to 1966. Books, journals, report materials and some unpublished manuscripts are listed in such areas as cognitive studies, vocational rehabilitation, instructional materials, science studies and English as a second language.

INNOVATIONS IN TEACHING AND TRAINING (1968)

Smith, Robert G., Jr.
American Data Processing, Inc., Detroit, Michigan
Available from: Automated Education Center, Box 2658, Detroit, Michigan 48321
ED 062-759

An instruction system is viewed as a "system of coordinated sets of instructional aids and activities designed to be as efficient as possible." The nature of an instructional system, cost-effectiveness rations, automated instruction and computer-based instruction are some of the topics considered. The general functions that must be designed into an instructional system are specified and the advantages and disadvantages of various ways to accomplish goals of the system are noted. Specific problems concerning the design and evaluation of the system are taken up; these include sequencing instruction, designing lessons and managing students. References are cited separately for each chapter; additional references relevant to the general chapter topics are also supplied. Annotated bibliographies on training quality control and training objectives are also provided. (JY)

INNOVATIONS IN THE ELEMENTARY SCHOOL CURRICULUM

Otto, Henry J. Educ Technol; 10; 5; 32-37 May 1970
EJ 021-184

Describes curriculum changes in the past 50 years and recent curriculum trends in elementary schools. Approximately 50 references are appended. (AA)

HUMANIZING THE SCHOOL THROUGH CURRICULUM PLANNING (1972)

Foshay, Arthur W.
Speech presented at the 104th Annual Convention of American Association of School Administrators, Atlantic City, New Jersey, February 12-16, 1972.
ED 059-178 MF-$0.65 HC-$3.29

To prevent the move to make schools more humane from developing into another educational fad, the author proposes an approach to curriculum design and evaluation that explicity relates the human condition to the necessary goals of teaching. To do this, he has prepared a grid in which the six elements of the human condition from developmental psychology intersect with the four elements of the operational goals. The operational goals of teaching are defined as fluency, manipulation, confidence/value, and persistence. The psychological categories are intellectual, emotional, social, aesthetic, spiritual and physical. The grid indicates that we have projected a monstrous version of the human condition by our failure to examine seriously 22 out of 24 elements that belong in comprehensive curriculum design and evaluation. We know little about the aesthetic, spiritual and physical aspects of growth and current evaluation schemes tend to leave out the areas of confidence/value and persistence. The grid can offer a kind of map for curriculum development for a humane school. (MBM)

THE INTERNAL ORGANIZATION OF JUNIOR HIGH SCHOOLS FOR INSTRUCTION (1968)

Riggs, Norman Dee

Available from: Mr. Kenneth Lindsay, Coordinator Title III, Utah State Board of Education, 1300 University Club Bldg., Salt Lake City, Utah 84111 (copies free)

ED 023-156 MF-$0.65 HC-$6.58

An analysis of the internal organization of innovative secondary schools was developed from questionnaire response data supplied by the principals of 121 junior high, intermediate and middle schools in 35 states. Criteria for comparison and evaluation were based primarily on related research and general organizational literature. The study found that the position of department head is the dominant organizational position and is used extensively by the principal to upgrade instruction. Of growing importance are a number of secondary positions, including teachers' advisory councils, curriculum coordinators and intersubject instructional teams. Schools with a pupil-teacher ratio of 20:1 and under were more innovative and had more administrative positions than those with a higher ratio. Supporting data are compared on a percentage basis in 29 tables. Findings are illustrated by organizational charts for 15 representative schools and a prototype organizational chart. A bibliography of 58 items related to administration, management and organization is appended. (JK)

A READINESS MODEL TO IMPLEMENT MODULAR SCHEDULING, 1971-72

Weiss, Ronald P.

Educational Research and Development Council of the Twin Cities Metropolitan Area, Inc., Minneapolis, Minn.

ED 062-685 MF-$0.65 HC-$3.29

This study was part of the ERDC's overall program of evaluation of various aspects of modular scheduling in its member schools. A readiness model to implement modular scheduling was developed, based on a review of the literature on modular scheduling and on practices and theoretical aspects of change and its implications. The model was tested by surveying 25 secondary schools that have successfully implemented modular scheduling. Nine phases of the model signify when and which members of the school and community should be involved in the change process. Fash phase also lists specific points for facilitation of the model to further assist the staff in accomplishing the objectives of that particular phase. (Author/MLF)

PUBLICATIONS OF THE WISCONSIN RESEARCH AND DEVELOPMENT CENTER FOR COGNITIVE LEARNING (1970)

Klausmeier, Herbert J.

ED 044-375 MF-$0.65 HC-$3.29

Each of these citations (over 200 technical reports are theoretical, working, and practical papers) is annotated in a listing arranged by program and project within the program. Projects under Program 1, "Conditions and Processes of Learning," are titled Situational Variables and Efficiency of Concept Learning; Motivation and Individual Differences in Learning and Retention; Task and Training Variables in Human Problem Solving; Basic Pre-Reading Skills; Identification and Improvement; Peer Group Pressures on Learning; and Structure and Concept Attainment Abilities. Those under Program 2, "Processes and Programs of Instruction," are Prototypic Instructional Systems: Elementary Mathematics; Prototypic Instructional Systems: Elementary Science; and Individually Guided Instruction: Elementary Reading. Completed projects in Program 1 are Computer Simulation of Concept Attainment; Rule Learning; Project Motivated Learning; Media and Concept Learning; Rehabilitation of Disadvantaged Youth in Respect to Basic Educational and Social Skills; and Motivation and Concept Learning. Those in Program 2 are A System of Individually Guided Instruction: English Language, Composition and Literature; Prototypic Instructional Systems: The Teaching and Learning of Concepts in Verbal Argument; and Concepts on Political Science. Completed Program 3 "Facilitative Environments" includes Project MODELS; Models for Effecting Planned Educational Change; and Longitudinal Study of Education Effectiveness of Reorganized School Districts. (JS)

NEW PRODUCTS IN EDUCATION. PREP-29. (1972)
National Center for Educational Communication (DHEW/OE), Washington, D. C. Division of Practice Improvement.
Available from: Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 ($6 a year; foreign, $1.50 additional, Single copy: $.55)
ED 059-410 MF-$0.65 HC-$3.29

New educational products, broadly defined as validated output from education R & D programs designed for practical application, are listed. Some of the products are directed toward educational problems of critical importance; others address themselves to instructional or administrative topics of lower current priority. The products, nominated by their developers and reviewed by a panel of educators, have been satisfactorily field tested, and are available for widespread implementation. The products are: Adult Basic Education: ESL-Empleen Ingles; Comprehensive School Mathematics; Cooperative Urban Teacher Education; Effective Questioning--Elementary Level; First Year Communications Skills Program; Home-Oriented Early Childhood Education; Individualizing Instruction in Mathematics; MATCH (Materials and Activities for Teachers and Children) Box; Multi-Unit Elementary School; Parent/Child Toy Lending Library; Patterns in Arithmetic; Reinforced Readiness Requisites Program; and the Teaching of Science--A Self-Directed Teacher Education Program. Descriptions of each product are given, together with the developers' names and addresses. In addition, a list of some of the schools where the products are being used and the names of people with knowledge of their applications is provided. Exhibits on 10 of the products are available. (DB)

AN INFORMATION AND MANAGEMENT SYSTEM FOR INDIVIDUALLY PRESCRIBED INSTRUCTION. WORKING PAPER 44 (1968)
Cooley, William W.; Glaser, Robert
Pittsburgh University, Pa. Learning Research and Development Center
ED 026-862 MF-$0.65 HC-$3.29

A model of the educational process and a derived procedure series for implementing an individualized instruction system are presented. The application of computer technology to individualized instruction requires an operational definition of the educational process in terms of school practices. A process model involving three major sets of variables, educational goals, individual capabilities and instructional means, with means a function of goals and capabilities, is outlined. Following upon this conceptual model, an instructional model and the functional basis of an individually prescribed instruction (IPI) system are developed as a sequence of operations. As instruction proceeds, performance is monitored and assessed, and necessary adaptations occur at subgoal decision points. The system is also evolutionary; it is able to compare interim student behavior and final outcomes with predictions of original operational functions

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and provide the basis for modification when appropriate. Experience obtained in introducing computer assistance into a currently operational IPI system is described at length and system research abilities, including a cumulative data bank for basic learning and measurement studies. are discussed. (SS)

FEASIBILITY OF USING AN EXPERIMENTAL LABORATORY FOR IDENTIFYING CLASSROOM MULTI-MEDIA PROBLEMS AND REQUIREMENTS. FINAL REPORT. (1968)
Kent, William P.; and others
System Development Corporation, Falls Church, Virginia
ED 029-492 MF-$0.65 HC-$6.58

Multimedia can significantly improve education, but only to the extent that their impact is perceived and planned for. Planning might be accomplished in a comprehensive, multimedia development laboratory, organized around methodology and functions rather than equipment or facilities. Such a laboratory might plan, supervise, evaluate and influence the implementation of complete educational systems making optimum use of multimedia and telemedia in an integrated and continuous manner. Of possible simulation laboratories, a semi-manual computer-based laboratory might be the most effective, but its main contribution would be as a research vehicle; it would not bring about major changes. The methodology of this study consisted of seeking expert opinions, visits to innovative installations, and a review of the multimedia state-of-the-art. No experiments were undertaken, nor was a prototype laboratory built or tested. Annual cost of a comprehensive, multimedia development laboratory is roughly estimated at $2,000,000. It is recommended that the Commission on Instructional Technology favorably consider the feasibility of such a laboratory. A bibliography and descriptions of various operations presently making use of multimedia are appended. (GC/MF)

STRUCTURED PRACTICE IN TEACHING: A BIBLIOGRAPHY OF ERIC DOCUMENTS. (2-71)
Poliakoff, Lorraine, Comp.
ED 048-123 MF-$0.65 HC-$3.29

This 414 item bibliography contains citations of published and unpublished documents and journal articles processed by the Clearinghouse between July 1968 and June 1970 related to the "means and methods by which pre- and in-service school personnel can secure structured practice in developing skills and insights."

TEAM TEACHING BIBLIOGRAPHY (1969)
Smith, Donna M.; Fitch, Judith Pruess
Upper Midwest Regional Educational Lab., Inc., Minneapolis, Minn.
ED 035-098 MF-$0.65 HC-$6.58

This bibliography was compiled during a selective review of the literature on team teaching by two staff members of the Upper Midwest Regional Educational Laboratory. It contains approximately 120 ERIC documents; 20 SRIS douments (School Research Information Service); 130 books and pamphlets; 7 films; 700 periodicals; and 120 reports, papers, studies, proposals, and theses. Nearly all entries were published since 1950. Ninety-six of the books, periodicals and reports have been searched and classified into 10 categories. Explanation of the classification system is included. The ERIC documents, which include everything on team teaching processed by this system through February 1969 and SRIS documents have all been searched and classified. Explanation of this classification system is also included. (Author/DE)

A REVIEW OF RESEARCH ON BEHAVIORAL OBJECTIVES AND LEARNING HIERARCHIES (1971)

Walbesser, Henry H.; Eisenberg, Theodore A.
ERIC Information Analysis Center for Science Education, Columbus, Ohio
Available from: Ohio State University, Center for Science and Mathematics Education, 248 Arps Hall, Columbus, Ohio 43210 ($1.25 plus $.25 handling)
ED 059-900 MF-$0.65 HC-$3.29

In the first part of this paper, the purposes of behavioral objectives are outlined; research is then summarized, including the influence of knowledge of the behavioral objectives on a learner's performance, teacher recognition of behavioral objectives, and student attitudes to behavioral objectives. The second part presents a summary of methods of constructing learning hierarchies. The research topics outlined include the structure and efficiency of expert versus student generated hierarchies, relationships between performances on adjacent levels of a hierarchy, and the psychometrics of learning hierarchies.

ANNOTATED BIBLIOGRAPHY OF BOOKS ON HOW TO STATE BEHAVIORAL OBJECTIVES (1971)

McGill University, Montreal (Quebec). Center for Learning and Development
ED 059 968 MF-$0.65 HC-$3.29

This annotated bibliography contains listings of 17 books on how to state behavioral objectives. Most of the books refer specifically to designing programmed materials, but the procedures and principles apply to general instructional design and evaluation. Books and articles about behavioral objectives are not included. (MBM)

GUIDELINES FOR COMMUNICATION ARTS: K-12 (1971)

Available from: Board of Catholic Education, Diocese of Cleveland, 5103 Superior Avenue, Cleveland, Ohio 44103 ($9.50)
ED 059-186

These guidelines are part of a total curricular program K-12 developed for use in the elementary and secondary schools of the Diocese of Cleveland. Objectives for the study of the communication arts in these grades are listed as follows: (1) Listening with attention, discrimination, and empathy, (2) Viewing with perception, discrimination and appreciation, (3) Thinking clearly, critically and creatively, (4) Reading with comprehension, discernment, and for enjoyment, and (5) Speaking and writing with clarity and precision, thoughtfully and effectively, and with honesty and conviction. A section on teacher resources for these grades is included. (CK)

WORKSHOPS ON THE USE AND ADAPTATION OF NEW MEDIA FOR DEVELOPING CREATIVITY: NATIONAL SCHOOLS PROJECT. FINAL REPORT. (1968)

Williams, Frank E.
Macalester College, St. Paul, Minn.
ED 025-146 MF-$0.65 HC-$9.87

Structured by a three-dimensional learning theory model, an experimental teacher education project was designed to develop creativity in elementary school children. In this model, the interaction of standard curriculum and 23 project-oriented teaching strategies produced the components of productive-divergent thinking; fluency, flexibility, elaboration, originality, curiosity, risk-taking and complexity. The National Schools Project conducted in-service training workshops at six project school sites to acquaint teachers and school administrators with methods of eliciting these components of creative thought. Ideas generated, classified, and field-tested by project teachers

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during training constituted the analytic basis for evaluation of training effectiveness. Experience with the pilot project indicates that inservice training should be continued in the operational phase to improve the teacher's familiarity with these progressive educational strategies. Appendices to this report consist of illustrative handout materials utilized during the five general workshops; independent evaluation data collected at three project schools; and a sample copy of "Classroom Ideas for Developing Productive-Divergent Thinking," a collection of teaching ideas. Annotated reference lists classify 93 books and 47 films by grade level, thinking process, teaching strategy and subject area. (TI)

AN APPLICATION OF SIMULATION TECHNIQUES TO AN INNOVATIVE TEACHER TRAINING PROGRAM (1970)

King, Arthur Dean
Florida State University, Tallahassee. Computer-Assisted Instruction Center
Available from: National Technical Information Service, Springfield, Va. 22151
ED 046-251 (AD-716 952, MF-$.95 HC-$3.00)

The purposes of this investigation were to analyze a teaching training program in order to construct models that represent the instructional process and to develop procedures for implementing the models ona computer system. The training program which provided the framework for these research goals was labeled a "behavioral simulation," since it utilized the trainee's behavior as the most significant system component. The model that represented the behavioral simulation was implemented on a computer, and these procedures were labeled a "system simulation." The function of the behavioral simulation was to train prospective teachers by providing an environment which facilitated transfer to the classroom. The function of the system simulation was to generate and test propositions concerning this new training system by translating ideas into the system and by testing the implications of the ideas or strategies. Within the behavioral simulation the level of the trainees' average task performance suggested that the complex skills involved in teaching can be organized in ordered sequences of complementary skills. Appendices contain supporting materials. A bibliography is given. (Author/MF)

LEARNING DIFFERENCES RESULTING FROM TEACHER- AND STUDENT- CENTERED TEACHING METHODS (1967)

Baird, J. Hugh; Webb, Clark
ED 011-253 MF-$0.65 HC-$3.29
This paper was presented at the American Educational Research Association Annual Meeting (New York, February 16-18, 1967).

This inquiry into the effects of greater learner autonomy on achievement among teacher education students compared a lecture-discussion method used in regular class meetings with a "continuous progress" method in which students had only two formal class meetings devoted to procedural, not substantive matters. One control and one experimental class (taught by the same instructor) at Brigham Young University were involved. In the experimental method the student was given a packet containing a list of behavioral objectives, instructions, a list of assignments, study guide questions, introductory readings, and, for some units, a worksheet. He was tested upon completion of each unit and moved to the next unit if he passed. If not, he repeated the unit and was retested, sometimes on a different form of the test. On a 75-item criterion test (also used as a pretest), significantly higher post-test scores were earned by the continuous progress students. Significant differences in favor of the experimental method were found for the 10 students with the lowest grade-point average.

Results were considered to justify more extensive investigation of the effects of increasing student autonomy for learning. (AW)

INSTRUCTIONAL PSYCHOLOGY (1972)
Glaser, Robert; Resnick, Lauren B.
Pittsburgh University, Pa. Learning Research and Development Center
Available from: Annual Reviews, Inc., 4139 El Camino Way, Palo Alto, Calif. 94306 ($1.00)
ED 062-657

Identifies areas, issues and problems which are emerging as a result of the contact between scientific endeavors and technological developments in education. Through their review of the literature, a characterization and momentary definition of the field of instructional psychology are provided. Their reporting of the literature is often illustrative and not exhaustive. Many areas are not covered, so as to permit some depth in those which are: (1) the analysis of tasks; (2) early education; (3) instruction in Piagetian concepts; (4) learning and individual differences; (5) behavior modification; and (6) learning from written prose. An extensive bibliography (346 entries) concludes the review. (TL)

CURRICULUM MATERIALS (1970)
Association for Supervision and Curriculum Development, Washington, D. C.
Available from: Association for Supervision and Curriculum Development. NEA, 1201 16th Street, N.W., Washington, D. C. 20036 (NEA Stock Number 611-17822, $2.00)
ED 041-352

This bibliography of 941 entries contains sections on general curriculum development, general curriculum materials and the subject areas traditionally found in public schools. Emphasis is placed on personalized curriculum materials, especially programed materials, nongraded systems, and behavioral objectives programs. Other sections include guidance-counseling, school-community relations and special education. (RA)

INSTRUCTIONAL MATERIAL
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INSTRUCTIONAL MATERIALS CENTER, AN ANNOTATED BIBLIOGRAPHY. (1967)
Davis, Harold S.
Available from: Educational Research Council of Greater Cleveland, Rockefeller Bldg., Cleveland, Ohio, 44113 ($1.00).
ED 022-257 MF-$0.65 HC Not Available from EDRS

This annotated bibliography on planning, staffing, and operating instructional materials centers in elementary, secondary and higher education institutions lists 24 books and pamphlets and 187 articles published between 1949 and 1966. Topics covered which related to instructional materials centers include team teaching, audiovisual materials, school libraries, independent study, learning centers, curriculum laboratories, and individualized instruction. (TT)

INSTRUCTIONAL MEDIA CENTER, AN ANNOTATED BIBLIOGRAPHY. (1971)
Davis, Harold S. Crotta, David J.
Available from: Educational Research Council of America, Rockefeller Building, Cleveland, Ohio, 44113 ($1.20)
ED 053-741

This bibliography stresses ideas that will enhance the planning, organization, and operation of a modern instructional media center. Approximately 185 references to books, pamph'ets and articles which were published between 1960 and 1971 comprise the bibiliography; entries are arranged alphabetically by the author, and each is provided with a brief annotation, the date of publication, and the publisher. (Author/SH)

CATALOGUE OF MATERIALS. (1969)
Tufts University, Medford, Mass. Lincoln Filene System for Citizenship and Public Affairs.
ED 051-063 MF-$0.65 HC-$3.29

This catalogue lists resource materials available to secondary social studies teachers using an inductive approach and multi-media techniques to create a variety of learning experiences. Seven supplemental classroom instructional programs were developed by the Center: 1) Dimensions of Citizenship; 2) Politics and Policy Making; 3) Urban Problems and Prospects, 4) The American Economic System; 5) American Civilization and History, 6) The Law and Citizenship; and, 7) The International System; Themes and Decisions. Materials are described for each of these areas with 20 different teacher guides available on such topics as: 1) Effective Citizenship: Upton Sinclair and the Jungle; 2) Citizenship Denied: Diary of a Young Girl; 3) Choosing a President, 1968: The American Political Process; 4) The Police: Fact and Fiction; 5) Conflict: A Game of American Life. Student narratives (reprints of case studies or excerpts of primary sources) are also available for many of the units. Instructional aids offered in this program have been produced through cooperative efforts of experienced high school teachers, the staff of Lincoln Filene Center, and Center consultants. Prices are given and an order form appended. (Author/JSB)

CATALOG OF PROGRAMMED INSTRUCTIONAL MATERIAL. (INCLUDING CHANGE I) (1971)
Department of the Navy, Washington, D. C. Bureau of Naval Personnel
ED 058-720 MF-$0.65 HC-$16.45

A catalog lists programed instruction material for military tasks that has been developed by the U. S. Navy. Part one of the catalog lists programed material alphabetically by subject area. Information provided for each program includes title, classification, identification code to be used when requesting copies of the program, population for whom the program was designed, style of programing, average time to complete the program, validation data, and author. Part two lists programs under development alphabetically by subject area. Programs in parts one and two are indexed and cross-referenced in the third section. Complete addresses for obtaining programed material are given in a fourth section. (JY)

PROGRAMED INSTRUCTION MATERIALS, 1964-'65, A GUIDE TO PROGRAMED INSTRUCTION MATERIALS AVAILABLE FOR USE IN ELEMENTARY AND SECONDARY SCHOOLS AS OF APRIL, 1965 (INCLUDING A LISTING OF PROGRAMS ANNOTATED IN "PROGRAMS '63").
Komoski, P. Kenneth, Ed.; and others
Columbia University, New York, N.Y. Institute for Educational Technology.
ED 018-110

This is a subject bibliography listing 542 programed instruction units for elementary and secondary schools. Programs printed before September 1963 are listed by title and publisher. Later ones are represented by forms filled in by publishers, showing target population, length and form of program, machine requirements (if any), cost, and extent of any prepublication testing. Charts show cumulative data on several aspects of the industry during the period 1960-1965. This document was compiled and published by the Center for Programed Instruction of the Institute of Educational Technology, Teachers College, Columbia University. (MF)

CATALOG OF FREE TEACHING MATERIALS. (1971)
Salisbury, Gordon
Available from: Catalog of Free Teaching Materials, P.O. Box 1075, Ventura
California 93001 ($2.68)
ED 058-747

Free teaching materials which will be available at least until 1973, which have been evaluated by accredited teachers, and which have direct bearing on curriculum are listed in this catalog. Individual items are grouped under appropriate subject headings by title or source, and a description of the item is included. In addition, the approximate grade or comprehension level, the number of copies which may be requested free of charge, and the organization sponsoring the item are provided for each entry. The organizations are listed at the end of the catalog with complete addresses (SH)

CURRICULUM MATERIALS, 1972. ASCD EXHIBIT OF CURRICULUM MATERIALS AT ASSOCIATION FOR SUPERVISION AND CURRICULUM DEVELOPMENT ANNUAL CONFERENCE (27TH, PHILADELPHIA, PENNSYLVANIA, MARCH 5-8, 1972).
Available from: Association for Supervision and Curriculum Development, NEA
Box 5, 1201 Sixteenth Street, N.W., Washington,D.C. 20036
(Stock Number 611-17854, $2.00)
ED 061-637 MF-$0.65 HC Not Available from EDRS.

This bibliography of over 1000 items contains sections on general curriculum development and materials, and on the subject areas traditionally found in public schools. Emphasis is placed throughout all categories on personalized curriculum materials with sharpest focus on materials for drug education, black studies, family living, and ecology. Other sections include special education, media, and guidance-counseling. (RA)

THE AUDIO-VISUAL EQUIPMENT DIRECTOR. EIGHTEENTH EDITION.
Herickes, Sally, Ed.
Available from: National Audio-Visual Association, Inc., 3150 Spring Street,
Fairfax, Virginia 22030 ($9.25)
ED 059-583

This equipment directory for 1972-73 is designed to offer everyone who uses media a convenient, single source of information on all audiovisual equipment on the market today. Photographs, specifications, and prices of more than 1,500 models of equipment are provided, and over 520 manufacturers are represented with approximately 1,900 items of 67 categories. The directory includes motion picture, filmstrip, slide, opaque, overhead, and special purpose projection equipment; audiotape recorders; record players; video tape recorders and players; video cameras, monitors, projectors, and multimedia systems: reading and tachistoscopic devices, electronic programmers, dissolve controls; programed instruction equipment; projection stands; screens, storage cabinets; and film inspection equipment. All models are completely described and are listed alphabetically by company name under each category.

NASA MOTION PICTURES

The National Aeronautics and Space Administration produces films describing NASA research and development programs in space and aeronautics and documenting the results of this research.

These films may be borrowed for showings to educational, civic, industrial, professional, youth and similar groups. There is no rental charge, however borrowers must pay the cost of return postage and insurance. A separate list of NASA technical films is available.

For lists of films and to get appropriate regional film library addresses, write NASA, Washington, D.C. 20546

EDUCATORS GUIDE TO FREE FILMS, 27TH ANNUAL EDITION, 1967.
Horkheimer, Mary Foley, Comp.; Diffor, John W., Comp.
Available from: Educators Progress Service, Randolph, Wisconsin, 53956.
ED 018-122

In a guide to all films available free of cost (no rental, service, or sales cost) throughout the United States generally, with those available in Canada indicated separately, 4,751 titles are listed with annotations. Of these, 1,056 titles are new. There are title, subject, and source indices. (MF)

USE OF PORTABLE VIDEO RECORDERS AS AN INSTRUCTIONAL SYSTEM DEVELOPMENT TOOL (1971)
Smith, Edgar A.
Air Force Human Resources Lab., Lowry AFB, Colo.
ED 058-733 MF-$0.65 HC-$3.29

Small portable videotape recorders can be used economically and effectively as "scratch pads" during course development. Current off-the-shelf equipment can be used for data gathering during the analysis of systems requirements and initial development of course equipment and test materials. Such equipment has been beneficial in revealing objectives that might otherwise be overlooked, developing a logical presentation without extraneous material, establishing definable objectives, and encouraging self-evaluation as an integral part of the learning process. During the development and validation stages, the equipment can be used for initial scripting, for editing and re-editing, for obtaining content approval, and for individual tryout by students. Finally, the techniques enable the course writers to obtain a viewable end product before they have to commit themselves on the media to be used. The videotapes can then be used as the draft or shooting script for the development of the manual, motion picture, or prenarrated slide sequence. The major criterion is that the equipment be available so that systems designers can use it with a minimum of interruption of their creative endeavors. (Author/JK)

EDUCATORS GUIDE TO FREE TAPES, SCRIPTS, AND TRANSCRIPTIONS. FOURTEENTH EDITION.
Wittich, Walter A.; Halstead, Gertie Hanson
Available from: Educators Progress Service, Randolph, Wis. 53956.
ED 018121

This guide is a selected, annotated list of 142 free tapes, 75 free scripts, and 136 free transcriptions. An introduction to the use, selection, and ordering of audio materials is given. Preliminary adultory tests for students are advised. There are title, subject, and source indices. (MF)

GAMES FOR GROWTH; EDUCATIONAL GAMES IN THE CLASSROOM. (1970)
Gordon, Alice Kaplan
Available from: Science Research Associates, Inc., College Division, 1540 Page Mill Road, Palo Alto, California 94304 ($4.25)
ED 058-715

Among the reasons for using games as a tool in education are that they motivate students, teach difficult concepts, give opportunities to make decisions and solve problems, and give usually poor students a chance to take the lead in class. Games now available from producers, most designed for use in social studies classes, are described here in detail. The teacher's role in the game, especially in the important debriefing session, where lessons of the game are made explicit, is explained. Suggestions for designing games and adapting existing games to new situations are given. A section on evaluating the learning impact of games notes that while games are not more effective than other teaching methods, they often teach processes, rather than facts, and they are just about the only medium teaching this. A supplementary section describes games for exploring attitudes of students, teachers, and community members. (JK)

HELPING THE TEACHER UTILIZE AIDES (PUB.-1971)
Saunders, J. and others
Innovative Resources, Inc., Post Office Box 26655, El Paso, Texas 79926

This publication represents an attempt to provide some clarification about the roles of teachers and teachers aides in the classroom. It provides a theoretical basis for determining differentiated staffing needs and also provides a transition from theory to practice. (The Authors)

"TEACHING ERIC". ENGLISH EDUCATION, v1, pp. 25-30, NOVEMBER 1970. 6pp. (JOURNAL ARTICLE)

Harvey, Robert C.

Presented in this article are various ways the ERIC system can be taught to prospective English teachers, and how students can make the best use of ERIC products even while they are students.

STUDY MATERIALS FOR ECONOMIC EDUCATION IN THE SCHOOLS. REPORTS OF MATERIALS EVALUATION COMMITTEES TO THE JOINT COUNCIL ON ECONOMIC EDUCATION.

Available from: Joint Council on Economic Education, 1212 Avenue of the
Americas, New York, New York 10036 ($1.50)

ED 049-971 MF-$0.65 HC Not available from EDRS

The Materials Evaluation Committee of the Joint Council reviewed both print and non-print supplementary student materials for economics in order to make this selected list of those materials thought to be suitable according to: 1) whether the materials are genuinely concerned with economic matters; 2) whether they are analytical in nature; and 3) whether they are appropriate for secondary school student use. They are grouped into six categories or sub-fields of economics: 1) general nature of economics; 2) markets, prices, and resource allocation; 3) income determination, stabilization and growth; 4) role of government and economic institutions; 5) international economics: trade, finance, and underdeveloped nations; and, 6) comparative economic systems, and economic history. Each citation in the bibliography has a brief annotation providing a description and the appropriate grade level of intended usage. (CWB)

CAREER EDUCATION. WHAT IT IS AND HOW TO DO IT. Page 1

THE WORLD OF WORK. A CURRICULUM GUIDE FOR GRADES ONE THROUGH TWELVE Page 1

"COUNTDOWN TO THE 70'S." OCCUPATIONAL INFORMATION FOR UPPER ELEMENTARY AND MIDDLE GRADES Page 1

K THROUGH 12 PROJECT IN CAREER DEVELOPMENT AND BRIDGING THE GAP BETWEEN SCHOOL AND WORK. FIRST INTERIM REPORT AND APPENDIXES Page 2

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IMPROVING A RURAL AREA SCHOOL PROGRAM WITH EXPANDED VOCATIONAL EDUCATION SERVICES BY UTILIZING COMPREHENSIVE CAREER ORIENTATION AND EXEMPLARY ACTIVITIES. INTERIM REPORT, VOLUME I RESOURCE BIBLIOGRAPHY FOR VOCATIONAL EDUCATION Page 5

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CAREER EDUCATION. WHAT IT IS AND HOW TO DO IT.
Hoyt, Kenneth B.; And Others (Pub.-1972)
Olympus Publishing Co., 955 E. 9th St., South, Salt Lake City, Utah. 84102
ED 062573 $4.00

This monograph was begun in the process of preparing "Career Education: A Handbook for Implementation" to accompany a film and slide-tape presentation as the basis for a national series of U. S. Office of Education sponsored conferences to introduce the career education concept to lay audiences. However, due to its length and because the information was of value to a larger audience, it has been published as a separate monograph. Prepared by leaders in the educational field, the information is designed to provide answers to questions concerning: (1) the nature of career education, including the philosophy behind it and major concepts, components, phases and issues associated with it, (2) the need for career education, including the relationship between social unrest and lack of emphasis on career education and the achievements and deficiencies in American education, (3) how career education developed and is being implemented in practice, (4) appropriate strategies of implementation for a school system interested in career education, and (5) the potential contribution of career education, including basic changes that will be necessary at all educational levels. A selected bibliography on career education is included. (SB)

THE WORLD OF WORK. A CURRICULUM GUIDE FOR GRADES ONE THROUGH TWELVE.
Pointer, Leah J., Ed.
Educational Systems Development Corp., New Orleans, La.
Orleans Parish School Board, New Orleans, La.
ED 059 368 EDRS Price MF-$0.65 HC-$3.29

This curriculum guide is designed to aid in providing occupational information and career decision-making skills for grades K-12. Major purposes of the guide are to: (1) provide occupational information that is both educational and vocational, (2) give the student experiences and training in decision-making, (3) develop in the student a healthy self-concept, and (4) utilize community resources to enhance the student's knowledge of careers. Detailed curriculum outlines are suggested for elementary grades (kindergarten, lower and upper primary), secondary grades (grades 7-11), and 12th grade. Several questionnaires, data gathering methods, sample parent interview forms, an attitude survey and self rating evaluation charts are appended. Resource materials for all grades are listed. (AW)

"COUNTDOWN TO THE 70's." OCCUPATIONAL INFORMATION FOR UPPER ELEMENTARY AND MIDDLE GRADES (Pub.-1971)
Florida State Department of Education, Tallahassee, Florida
Division of Vocation, Technical and Adult Education
ED 059 364 EDRS Price MF-$0.65 HC-$6.58

This program guide, developed under ESEA Title III funds in Atlanta, using 39 television programs, was adapted for use in Florda schools. Although it is built around 39 films, most of the information will be useful to the teacher or curriculum writer in the present form. Each unit represents an occupational area, such as employment opportunities in hospitals, education, banking or major industries such as petroleum, textiles or newspapers. For each occupational area, specific jobs are defined according to duties, personal qualifications and training. Thus for the unit covering education, the specific jobs of principal, teacher, teacher aide, custodian, cafeteria manager, secretary, counselor, librarian, library aide, maintenance mechanic and statistician are outlined. Suggested supplementary activities, a glossary of related vocabulary terms as listed in each unit, and recommended references are included. (CD)

K THROUGH 12 PROJECT IN CAREER DEVELOPMENT AND BRIDGING THE GAP BETWEEN SCHOOL AND WORK. FIRST INTERIM REPORT AND APPENDIXES.

Carlson, Clayton D. (Pub. 1971)
Watertown Independent School District 1, S. Dak.
ED 060 179 EDRS Price MF-$0.65 HC-$6.58

This exemplary project is designed to help all students bridge the gap between school and work by creating change through an inservice program for counselors and through the implementation of a program of occupational information, orientation and exploration for grades K-12. Phases of the project are: (1) staff recruitment and planning, (2) district staff orientation, (3) program implementation, and (4) evaluation data collection. Phases I and II were initiated during the first year of operation and the framework and materials are available for continuation of the third phase. A complete summary of the first year of operation is included in this report (GEB)

CAREER AWARENESS EDUCATION: INTRODUCTION, INSTRUCTIONAL RESOURCE UNITS AND ANNOTATED BIBLIOGRAPHY.

Olson, LeVene A., Ed.
Marshall University, Huntington, West Virginia, Department of Vocational-Technical Education
ED 064 510 EDRS Price MF-$0.65 HC-$6.58

Developed for use in Grades 1-6, this teaching guide provides 26 resource units on career awareness. Through a process called curriculum blending (correlating or relating subject matter to occupational requirements), occupational information can be introduced into one discipline or simultaneously into more than one discipline. Arranged in a 3-column format of procedures, student activity and resources, the guide suggests teaching strategies for such units as: (1) Wonderful World of Work, (2) Working at Home, (3) Family Living, (4) Our Parents in the World of Work, (5) Clothes of Today, (6) Workers Within Our Community, (7) Protective Services Provided by Our State, (8) Crafts of Appalachia, and (9) Careers in Music. Suggested teaching techniques include field experiences, simulated exercises of cognitive, affective and psychomotor nature, resource role models and multi-media activities. (JS)

WORLD OF WORK CAREER MOTIVATION. CURRICULUM GUIDE FOR GRADES K-6. OHIO'S CAREER CONTINUUM PROGRAM. (Pub. 1972)
Ohio State Department of Education, Columbus. Div. of Vocational Education
Available from Instructional Materials Laboratory, Trade and Industrial Education, The Ohio State University, 1885 Neil Avenue, Columbus, Ohio 43210 ($3.50; discount for quantity)
ED 062 565 EDRS Price MF-$0.65 HC-$9.87

Prepared largely by representatives of Pilot Career Motivation programs from nine Ohio school districts during a summer workshop and subject to correction, revisions, and additions by teachers, this curriculum guide is intended to assist the elementary teacher in implementing a career motivation program, which is the first phase of a 3-phase career development program and stresses the goals of awareness, appreciation and motivation. Divided into three color-coded sections by grade level (K-2, 3-4, and 5-6), topics and objectives have been developed for three of the seven broad career development areas, including The Individual and His Environments, World of Work, and Self. Four additional areas will be developed.

CAREER DEVELOPMENT RESOURCE GUIDE, K-5.
Howard County Board of Education, Clarksville, Maryland.
ED 064 494 EDRS Price MF-$0.65 HC-$3.29

This resource guide for Grades K-5 contains ideas and activities for implementing a program of occupational awareness into the existing elementary school curriculum. The materials in the guide are intended to help children develop: (1) a positive and realistic self concept, (2) knowledge of the world of work, (3) wholesome work attitudes, and (4) using leisure time profitably. For each of these major concept areas, generalizations are listed, and activities and ideas are suggested for each grade level. A variety of techniques are suggested for accomplishing the concepts, including role playing, field trips, class discussions, films and filmstrips, and individual projects. Two sample unit plans containing rationales, objectives, teaching strategies, and evaluation suggestions are provided for developing wholesome work attitudes and knowledge of the world of work for using leisure time profitably. Sample crossword puzzles, a word maze, other student materials, and a bibliography of teacher and student references are included (SB)

A GUIDE FOR OCCUPATIONAL ORIENTATION -- "THE WORLD OF WORK." GRADES 5-7 (Pub. 1971)
Pharr-San Juan-Alamo Independent School District, Tex.; Texas Education Agency, Austin.
ED 063 473 EDRS Price MF-$0.65 HC-$6.58

This curriculum guide is designed to orient students in Grades 5-7 to the world fo work by stimulating interest in planning a career or vocation. The materials are divided by grade level into two sections, with Grades 5 and 6 concentrating on career awareness through the exploration of 26 different occupations and Grade 7 concentrating on such career development topics as self awareness, educational awareness, employment-seeking skills and other types of occupational information. The following instructional components are provided for each occupation and career development topic: (1) general and behavioral objectives, (2) learning experiences, which consist of such activities as student skits in which students role play workers, individual activities, and group discussions stiumated by resource persons, films, or other instructional aids, and (3) a listing of instructional materials and resources. A bibliography of films, filmstrips, resource persons, field trips, magazines and books is included. (SB)

ELEMENTARY SCHOOL INDUSTRIAL ARTS INTERACTION TECHNOLOGY FOR CHILDREN. A POSITIVE APPROACH TO EDUCATION FOR A CHANGING SOCIETY. (Pub.-1972)
Louisiana State Department of Education, Baton Rouge.
ED 061 444 VT 014 984 EDRS Price MF-$0.65 HC-$3.29

This resource guide provides a conceptual basis for the elementary teacher using industrial arts as a means of introducing children to industrial processes and orienting them to the physical and material world. Included in the guide are manipulative activities and experiences that will help to broaden the child's knowledge about the interdependence of people and the world of work as it involves them and their families. Seven categories of elementary industrial arts programs are briefly outlined: limited and comprehensive classroom, laboratory, traveling teacher, mobile and central laboratory and summer school enrichment programs. An example of a resource unit for primary level is given in detail including: (1) purposes, (2) learning activities, (3) skills developed, and (4) resource materials. Included in the guide are: (1) a list of safety rules for the teacher, (2) source of supplies, (3) an evaluation checklist, (4) suggestions for furniture, (5) an outline for organizing instructional plans and (6) one for studying basic raw materials of industry. (JS/MU)

REVIEW AND SYNTHESIS OF INFORMATION ON OCCUPATIONAL EXPLORATION.
Budke, Wesley (pub.-June 1971)
(State-of-the-Art-Review)
VT 012 730 RIE issue unknown

The aim of this review is to serve as a useful reference for educators who will be developing occupational exploration programs in kindergarten through Grade 12. The primary focus is on total school responsibility in organizing, implementing, and operating occupations exploration programs.

ABSTRACTS OF EXEMPLARY PROJECTS IN VOCATIONAL EDUCATION. (1971)
Office of Education (DHEW), Washington, D. C.
Division of Vocational and Technical Education
ED 060 189 EDRS Price MF-$0.65 HC-$6.58

In response to an invitation to interested school districts and organizations to submit proposals for conducting research-based vocational exemplary projects, 175 were submitted. After a review and evaluation, the best from each state, the District of Columbia, Trust Territories of the Pacific Islands and Puerto Rico were funded. This document contains an abstract of each of the 54 projects, including two from Minnesota. The state, project title, director, applicant organization, estimated funds, duration and a program description are included in each abstract. (GED)

IMPROVING A RURAL AREA SCHOOL PROGRAM WITH EXPANDED VOCATIONAL EDUCATION SERVICES BY UTILIZING COMPREHENSIVE CAREER ORIENTATION AND EXEMPLARY ACTIVITIES. INTERIM REPORT, VOLUME I. RESOURCE BIBLIOGRAPHY FOR VOCATIONAL EDUCATION. (Pub.-1971)

Holstein, Herbert B.
Lincoln County Schools, Hamlin, West Virginia
ED 059 388   EDRS Price MF-$0.65   HC-$3.29

This resource bibliography identifies instructional materials useful in career education programs. Items included in the guide are: (1) books, (2) filmloops, (3) filmstrips, and sound filmstrips using records and cassettes, (4) kits, (5) puzzles, and (6) suggested field trips. Grade levels are given for most of the listings. Also, a special section lists free and inexpensive educational materials for levels one through six. (JS)

IMPROVING A RURAL AREA SCHOOL PROGRAM WITH EXPANDED VOCATIONAL EDUCATION SERVICES BY UTILIZING COMPREHENSIVE CAREER ORIENTATION AND EXEMPLARY ACTIVITIES. INTERIM REPORT, VOLUME II. RESOURCE BIBLIOGRAPHY OF COMMERCIALLY PRODUCED CAREER EDUCATION MATERIALS (Pub.-1971)

Holstein, Herbert B.
Lincoln County Schools, Hamlin, West Virginia
ED 059 389   EDRS Price MF-$0.65   HC-$3.29

This resource guide identifies commercially produced career education materials. Items found in the annotated guide include: (1) books, (2) filmstrips, (3) filmloops, (4) records, and (5) cassettes. In addition to the annotation, listings include the grade level for which the item was used in the project and the relevant occupational focus for which the item is designed to be used. (JS)

IMPROVING A RURAL AREA SCHOOL PROGRAM WITH EXPANDED VOCATIONAL EDUCATION SERVICES BY UTILIZING COMPREHENSIVE CAREER ORIENTATION AND EXEMPLARY ACTIVITIES. INTERIM REPORT, VOLUME III. ELEMENTARY SCHOOL PROJECT FOR LEVELS ONE-SIX AND MIDDLE SCHOOL PROJECT FOR LEVELS SEVEN AND EIGHT. (Pub.-1971)

Holstein, Herbert B.
Lincoln County Schools, Hamlin, West Virginia
ED 059 390   EDRS Price MF-$0.65   HC-$19.74

This report provides instructional materials useful in career awareness and career orientation programs. Designed specifically for grades one through eight, each part of the multiple volume report includes: (1) general objectives, (2) behavioral objectives, (3) teaching strategies, (4) evaluation techniques, (5) field trip information, and (6) a resource bibliography. Also, teaching units for grades 1-6 were developed to assist the teacher in selecting classroom activities for the learning period. These units cover such topics as: (1) Wonderful World of Work, (2) Our Parents In the World of Work, (3) Clothes of Today, (4) Workers Within Our Community, (5) Opportunities In Our State, (6) Crafts of Appalachia, (7) Careers In Music, and (8) Communicating Through Letters. For Grades 7 and 8, occupational clusters were identified which include: (1) manufacturing, (2) construction industry, (3) service, (4) transportation, and (5) business and related occupations. (JS)

IMPROVING A RURAL AREA SCHOOL PROGRAM WITH EXPANDED VOCATIONAL EDUCATION SERVICES BY UTILIZING COMPREHENSIVE CAREER ORIENTATION AND EXEMPLARY ACTIVITIES. INTERIM REPORT, VOLUMEIV. RESOURCE BIBLIOGRAPHY IN CAREER EDUCATION. (Pub.-1971)

Holstein, Herbert B.
Lincoln County Schools, Hamlin, West Virginia
ED 059 391 EDRS Price MF-$0.65 HC-$3.29

This resource guide identifies locally produced curriculum and instructional materials. Items found in the annotated guide include: (1) teaching units for levels 1-6, (2) occupational awareness tests, (3) questionnaires, and (4) inservice training methods and materials. In addition to the annotation, each listing includes the grade level for which it was designed and the extent to which the materials have been tested, refined and validated in actual classroom use. The guide cites an evaluation study of this exemplary project in career education. (JS)

PLANNING THE IMPLEMENTATION OF A BUSINESS EDUCATION LEARNING SYSTEM. PROGRAMMED INSTRUCTIONAL MATERIALS AVAILABLE FOR POSSIBLE USE IN A BUSINESS EDUCATION LEARNING SYSTEM. A SUPPLEMENT TO THE FINAL REPORT. (Pub.-1971)

Johnson, Ronald D.
ED 058 417 EDRS Price MF-$0.65 HC-$3.29

This inventory of programmed instructional materials useful in business education setting was developed specifically for the Business Education Learning System (BELS), and is divided into sections on: (1) Software, (2) Software with Accompanying Hardware, and (3) Hardware. Items in the software inventory are arranged by business subject areas and include tapes and programmed textbooks. The second section includes instructional media such as a 30-lesson filmstrip series on English-Communication Skills which is accompanied by a TT-33 programmed projector. Listed in the hardware section are such items as a: (1) pacerecorder and pacer, (2) cassette player, (3) cassette listening center, (4) port-a-carrel, (5) audio-tutorial learning center, and (6) custom electronic classroom. Price and availability information are provided for each item in the inventory. (JS)

CAREER EDUCATION IN THE ENVIRONMENT. A HANDBOOK.

Olympus Research Corporation, Washington, D. C.
Available from: Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (Catalog No. HE 5.6/2:EN 8/2, $3.00)
ED 063 471 EDRS Price MF-$0.65 HC-$13.16

This handbook designed for secondary school use in exploring environmental problems and solutions and providing information on existent and emerging career opportunities, will be useful to school administrators, curriculum planners, instructors, counselors, librarians, and students. The handbook is in three parts: (1) Career Education and the Environment--an overview which sketches the extent of, reasons, and solutions for our present environmental degradation, (2) Environmental Careers--a comprehensive report divided into categories of science and research, technology and education, technology implementation, and equipment operation, and (3) two environmental education curriculums--a 15 day self-contained curriculum unit on environmental awareness and pollution tested in the Salt Lake School District, complete with an outline, lesson plans, student readings and an exam. and a semester length course which focuses on the physical world, natural resources, and social problems with environmental overtones. An annotated 61-page bibliography supplements these curriculums and is divided into eight categories for easier use as a selective guide for all schools wishing to start or upgrade their holdings in environmental literature. (CD)

HEALTH OCCUPATIONS EDUCATION--INSTRUCTIONAL MATERIALS. (Pub.-1972)
Ohio State University, Columbus. Center for Vocational and Technical Education
Available from: Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402
ED 062 575 EDRS Price MF-$0.65 HC-$3.29

This compilation presents over 150 resumes of instructional materials in health occupations education which have appeared quarterly in "Abstracts of Instructional Materials in Vocational and Technical Education" (AIM), Fall 1967 through Fall 1971. Resumes cover a broad range of fields and occupations, such as dentistry, dietetics, nursing, paramedical occupations, health personnel, and pharmacy. The resumes are arranged in ascending order according to an accession number and include the following information: (1) author(s), (2) title, (3) institutional source, (4) sponsoring agency, (5) grant, contract and program area numbers, (6) report and bureau numbers, (7) available sources, (8) descriptors and identifiers which characterize the contents of the document, and (9) an abstract of the document. Author, subject and conversion of document number indexes are included to help locate the abstracts by page number and accession number. The full texts of documents are available from the original sources or from ERIC Document Reproduction Service (EDRS) as microfiche or xerox reproductions. A sample resume and ordering information for AIM and EDRS reproduction are provided in an introductory section. (SB)

DEVELOPMENT AND STRUCTURE OF INDUSTRY: STUDY GUIDE. (Pub.-1969)
Wisconsin State University, Platteville. College of Industry
Available from: Industriology Project, Department of Industrial Education, College of Industry, Wisconsin State University, Platteville, Wisconsin 53818
ED 037 556 EDRS Price MF-$0.65 HC-$6.58

The concept of industriology is based on the premise that children should be exposed to a comprehensive study of industry in existing industrial arts facilities with selected instructional materials. The concept has four phases, of which this one, The Development and Structure of Industry, is the first. Other phases cover Basic Elements and Processes of Industry, Modern Industries, and Vocational and Occupational Guidance. For each phase, four instructional aids were developed through research and trial testing in high schools, and are still subject to evaluation and revision. This study guide, one of the four aids for this phase, includes studies of the history and development of industry, four general types of industries which make up the industrial complex and six basic activities typical of most industries. (CD)

DEVELOPMENT AND STRUCTURE OF INDUSTRY: INSTRUCTIONAL AIDS LIST AND BIBLIOGRAPHY.
Wisconsin State University, Platteville College of Industry (Pub.-1969)
Available from: Industriology Project, Department of Industrial Education, College of Industry, Wisconsin State University, Platteville, Wisconsin 53818
ED 037 557 VT 010 315 EDRS Price MF-$0.65 HC-$3.29

This booklet is the last in a series of four instructional aids designed to implement the first phase of the industriology concept. This listing, intended to serve as a nucleus of resource materials, has been grouped into the following four sections: (1) Index to Numbered Instructional Media Sources, (2) Titles of Information, Job, and Activity Plan Sheets, (3) Instructional Media Other Than Books, and (4) Bibliography. (GR)

BIBLIOGRAPHY OF LEGAL EDUCATION MATERIALS. PDE WORKING PAPER. (Pub.-1971)
Pennsylvania State Department of Education, Harrisburg.
Bureau of General and Academic Education.
ED 056 955 EDRS Price MF-$0.65 HC-$3.29

This is a list of print and non-print materials that may have application to legal education for elementary and secondary grades. Types of print materials include student texts, periodicals and pamphlets, curriculum materials and books, both hardbound and paperback. Non-print materials include sound films and filmstrips and pre-recorded tapes. (Author/DJB)

A BASIC MANPOWER ECONOMICS LIBRARY. REVISED 1970.
Darcy, Robert L.; Powell, Phillip E.
Henderson State College, Arkadelphia, Arkansas.
M. H. Russell Center for Economics Education.
Available from: M. H. Russell Center for Economic Education, Henderson State College, Arkadelphia, Arkansas 71923
ED 045 475 EDRS Price MF-$0.65 HC-$3.29

The 33 publications included in this annotated bibliography are intended to serve as a basic listfor a small, but authoritative and balanced library. The materials included run from 1963 to 1970, and in addition to the books, a few appropriate periodicals are included. Selections were made on the basis that junior and senior high school teachers, and vocational counselors would be the users. The selections include current and historical information, statistical data, problem identification and analysis. It should be useful in explaining the major dimensions of the work system and the broader economic and social world to students. A list of 11 selected sources of free and inexpensive materials is also included. (Author/SLD)

ABSTRACTS OF INSTRUCTIONAL MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION (AIM).
Abstract Journal - 170 pp. - Summer 1970. 1970.
MF-$0.65 HC-$6.58

Instructional materials acquired and processed by the Clearinghouse for Vocational and Technical Education are classified by vocational or supporting service areas (e.g. Agricultural Education, Business and Office Education, etc.) Each item is also indexed by personal and institutional author, major subjects and identifiers. AIM is issued quarterly (Fall, Winter, Spring, Summer) and began Fall 1967.

REVIEW AND ANALYSIS OF CURRICULA FOR OCCUPATIONS.
Information series on many occupations. (Pub.-1970)
(State-of-the-Art Reviews) RIE in 1971 MF-$0.65 HC-$3.29

These reviews and analyses in many occupations (for example: Food Processing, Environmental Control, Construction, Health, Public Services, Transportation, Metalworking) were designed to aid curriculum development specialists, researchers and practitioners in assessing the current state-of-the-art related to curriculum development for construction occupations. The compact nature of the review should be of assistance to practitioners in identifying current curriculum offerings and useful materials to improve operating programs.

INDUSTRIAL ARTS CURRICULUM IMPROVEMENTS: A CHANGE AGENT'S GUIDE
Mason, Emmett June 1971 (Paper) RIE issue unknown

Contained with this publication are various industrial arts curriculum alternatives and suggestions for achieving their adoption. The document is written in guideline form for use by practitioners.

SIXTEEN ERIC CENTERS OPERATE IN FLORIDA VO-TECH SCHOOLS
Hancock, Robert E.
American Vocational Journal; 46; 1; 29-31 January 1971

Microfilmed data help to keep vocational educators abreast of research. Here is how it works. (Editor)

ETHNIC/RACIAL
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MEDIA FOR THE BLACK CURRICULUM. EDUCATIONAL TRENDS AND MEDIA PROGRAMS IN SCHOOL LIBRARIES Page 5

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MINORITY GROUPS: A BIBLIOGRAPHY AND SUPPLEMENT (1968)
Utah State Board of Education, Salt Lake City.
ED 042-767 MF-$0.65 HC-$3.29

The books, films, recordings, song books and additional sources recommended in this annotated bibliography and supplement on minority groups are listed in sections intended for general reference, elementary students, secondary students and teacher reference. Although the preponderance of sources deal with the history and culture of the American black (i.e., 110 secondary books from the series "The American Negro: His History and Literature"), the elementary section includes most minority groups and the secondary section cites 42 volumes from "The American Immigration Collection." Also included are books on constitutional rights, the nature of prejudice, teaching the disadvantaged and Anti-Semitism. (MF)

ETHNIC STUDIES (1971)
Laubenfels, Jean, Comp.
Available from: Association Referral Information Service, Ohio Education Association, Columbus, Ohio (Single Copy, Free)
ED 056-964 MF-$0.65 HC-$3.29

Seventy-two publications, ranging from ERIC documents to journal articles are annotated in this selective bibliography, one of 18 in a series. It is designed for educators who are developing and teaching curriculum materials that deal with American subcultures and their relationships. Included in the selections are program descriptions and resource materials. (DJB)

URBAN EDUCATION III: URBAN SCHOOL REFORM
Cohen, Sol Hist Educ Quart; 9; 3; 298-304 69 F
EJ 013-178

Although current writing in history of education has been broad in scope and mature in its use of the tools of historical scholarship, it is time to begin asking questions about power, prizes and group interests in the context of ethnic, religious, moral and social conflicts. (DE)

UNDERSTANDING DISADVANTAGED YOUTH: THEIR PROBLEMS AND POTENTIALS. AN ANNOTATED BIBLIOGRAPHY, OCTOBER 1970.
Mathieson, Moira B. and Tatis, Rita M., comps.
ED 044-380 MF-$0.65 HC-$3.29

Most of the 102 citations contained in this annotated bibliography are dated between 1968 and 1970. Materials were selected from those processed by ERIC; each entry includes information on microfiche and hardcopy availability.

A SELECTIVE BIBLIOGRAPHY ON NEW MEDIA AND THE EDUCATION OF THE CULTURALLY DISADVANTAGED. (1966)
Thompson, Wenda
Educational Media Council, Inc., Washington, D. C.
ED 015-961 MF-$0.65 HC-$3.29

The five sections of this bibliography refer the user to (1) basic texts and general references on instructional technology, (2) selected works on the culturally disadvantaged, (3) articles and papers on instructional technology and the education of the disadvantaged. (4) doctoral dissertations with implications for media in educating the disadvantaged, and (5) reports of current research and projects related to the use of educational media in educating this group. This article is Appendix F to the educational media council. A study of the concentration of educational media resources....Part I--Education of the Culturally Disadvantaged. Final report. (LB)

THE USE OF INTER-ETHNIC MATERIALS IN SUBURBAN SCHOOL DISTRICTS IN THE KANSAS CITY METROPOLITAN AREA (1969)

Caliguri, Joseph P.; Levine, Daniel U.
Missouri University, Kansas City. Center for the Study of Metropolitan Problems in Education.
ED 052-072 MF-$0.65 HC-$3.29

Summarizes an informal survey to determine how extensively inter-ethnic materials are being used in suburban school districts in the Kansas City Metropolitan Area. Data was obtained from responses to a questionnaire distributed to some 100 teachers and administrators from 20 districts enrolled in two courses, fall 1968. In no school or district did a percentage of black or other minority students constitute an appreciable proportion of the student body. Information was sought on the following topics: 1) representation, inclusion and characteristics of minority groups in textual materials; 2) written policies of school districts on the use of inter-ethnic materials; 3) procedures for the selection of inter-ethnic materials; 4) availability of films, filmstrips, tapes, records, magazines and other kinds of aids with inter-ethnic content; and 5) procedures utilized by school districts to distribute inter-ethnic materials. Some conclusions are: 1) the situation is very uneven; 2) more systematic efforts are needed to make high quality materials available and to help teachers use them effectively; 3) few districts have written policies encouraginig use of such materials; 4) few districts have procedures to ensure adequate selection of a quantity of resources. In conclusion, six policies are outlined to devise definite practices for encouraging the use of good inter-ethnic materials. A discussion by Garvin Hudgins on "The Negro Being Integrated Into History" is appended. (Author/JSB)

ANNOTATED BIBLIOGRAPHY ON INDIAN EDUCATION. (1969)

Green, Vicki
ED 059-819 MF-$0.65 HC-$3.29

With emphasis on Canadian Indians, approximately 180 articles, books, research documents, films, newspapers and periodicals are cited in this bibliography of resource materials for teachers of American Indian children. The 4 major categories represented by the materials are Indian education (background), cultural differences, history and anthropology and curriculum. The citations, most with availability statements are followed by annotations and are coded by subject area. The coding system consists of 11 subject-area categories with some subdivision of categories. The purpose of the bibliography is to make teachers more aware of resource materials available to them. The resources cited were published between 1873 and 1969. (JM)

BIBLIOGRAPHY OF SOURCES AND MATERIALS FOR TEACHING ABOUT AMERICAN INDIANS
Hirschfelder, Arlene
Social Education; 36; 5; 488-93 May 1972
EJ 056-817

Annotated bibliography.

CURRENT NORTH AMERICAN INDIAN PERIODICALS.
Blew, Carol Van Antwerp Holliday and others
Smithsonian Institution, Washington, D. C. Center for the Study of Man
ED 059-820 MF-$0.65 HC-$3.29

Approximately 150 newsletters, newspapers and other periodicals are cited in this bibliography of current sources of information about or directed toward North American Indians. One-sentence descriptions of content, ordering information and frequency of publication are provided. The majority of the periodicals cited emphasize current events of interest to American Indians or American Indian literature by native contributors. (JH)

JEWISH STUDIES IN THE SECONDARY SCHOOL: MATERIALS AND SOURCES, 1881-1917: THE GREAT MIGRATION. (1972)
Goldberg, Mark
State University of New York, Stony Brook. American Historical Association Education Project.
ED 058-143 MF-$0.65 HC-$3.29

During the period covered by this annotated bibliography the Jewish population in the United States increased 10-fold to two and one half million. Approximately 90% of the immigrants came from Eastern Europe, with a large proportion of them settling in New York City's Lower East side or Great Ghetto. The print sources cited represent a variety of disciplines and forms of discourse: history, sociology, short stories, novels, essays, letters, reportage, etc. All items are in the New York City Public Library, Main Branch; many are available on inter-library loan and commercially. Suggestions for reproducing works with expired copyright are included. The publications were written both recently and during the 37 year period covered, both by Jewish and non-Jewish authors. Topics include Jewish life in the shtetl, or Eastern European village, and America, especially New York City. All works are in English, some being translations from the original Yiddish. (Author/DJB)

THE NEGRO IN AMERICA: A BIBLIOGRAPHY. SECOND EDITION. (1970)
Miller, Elizabeth W., Comp. Fisher, Mary L., Comp.
Available from: Harvard University Press, Cambridge, Massachusetts ($10.00)
ED 059-321

Contents of this annotated bibliography, containing 6500 entries embracing significant citations, scholarly and popular, of books, journals, pamphlets and government documents mainly published between 1954 and February 1970, includes the following sections: general background; history; demography; definition and description; biography and letters; folklore and literature; theatre, dance, and the arts; the Negro in literature and the arts; music; intergroup relations; rural problems; urban problems; economic status and problems; employment; housing; education; public accomodations; politics and suffrage; the Freedom Revolution; Black Nationalism and Black Power; and, a guide to further research. (JM)

SOCIAL STUDIES RESOURCES FOR INCLUSION OF NEGRO HISTORY AND CULTURE IN THE DADE COUNTY CURRICULUM (1969)
Dade County Board of Public Instruction, Miami, Florida
ED 048-029 MF-$0.65 HC-$3.29

The guide is intended to help social studies teachers incorporate activities and materials into the curriculum that reflect the role of the Negro in history, and to encourage the development of student understanding of Negro history and culture. Suggested units are: Race and Culture, African Heritage, The Legacy of Slavery, Striving for Freedom, Twentieth Century Struggle for Civil and Human Rights, and The New Negro Movement: Freedom Now. Material resources are described and learning activities are suggested for each grade Level 7 through 12. They are related to concepts in these particular courses: Basic Education and Civics 7, World Cultural Georgraphy 9, American History 8 and 11, World History, Psychology, Sociology, United States Government, and Economics 12. The units, activities and materials could be used to support a one semester, half-credit, elective course in Negro History and Culture. A 16-page annotated bibliography of books and a list of social studies consultatns are appended. (SBE)

BLACK AMERICANS: PAST AND PRESENT. CONTRIBUTIONS TO AMERICAN LIFE.
Dade County Public Schools, Miami, Florida
ED 061-114 MF-$0.65 HC-$6.58

The guide 1) introduces black people who have made contributions to the American way of life; 2) identifies the cultural significance of their contributions or historical events in which they were involved; and, 3) provides a list of biographical multimedia materials. It may also serve to help teachers motivate pupils by establishing the components to the guide: 1) suggestions for using the guide; 2) suggested activities; 3) areas of contributions and names of contributors; 4) three units--Negroes in Early American History; Individual Recognition and Achievement; and Protest and Progress (the units contain no narrative, rather they consist of charts of events and personalities, and matching suggested resources); 5) Appendix A, White Americans who Contributed to Negro Advancement; 6) Appendix B, Examples of Suggested Activities, providing descriptions of specific activities that represent the categories mentioned in Section 12 above; 7) Bibliography; and, 8) Index.

TEACHING BLACK; AN EVALUATION OF METHODS AND RESOURCES (1971)
Available from: Multi-Ethnic Education Resources Center, Bldg. 30, Rm. 32, Stanford, Ca. 94305 (HC, $4.00); Education Resources Center, San Mateo County Office of Education, 590 Hamilton St., Redwood City, Ca. 94603 (MF-$.50)
ED 058-717 MF-$0.65 HC-$6.58

Methods and resources available for teaching about black culture and history in Africa and America are evaluated. An introductory essay, "The Black Experience: A Historial Overview," emphasizes aspects of black history which most black scholars deem relevant for correcting error and distortion, filling gaps of knowledge and helping black youth establish their identity. Curriculum packages developed by school districts were evaluated according to 1) whether their assumptions were based on African values and perspectives, 2) whether they destroyed stereotypes held by non-black students, and 3) whether they provided positive identity reinforcements for black students.

Of 236 packages evaluated, 40 are recommended for use and are described here. They are arranged according to classroom type (all black, all white, mixed) and by grade level (k-4, 5-8, 9-12). The packages are all available on microfiche. An annotated list of books, periodicals and films which can can be used as resources is included. (JK)

MEDIA FOR THE BLACK CURRICULUM. EDUCATIONAL TRENDS AND MEDIA PROGRAMS IN SCHOOL LIBRARIES
Robinson, Carrie ALA Bull; 63; 2; 242-246 69 Feb.
EJ 010-374

Discusses the purposes, materials and techniques of the new black curriculum. (JB)

"MEDIA FOR TEACHING AFRO-AMERICAN STUDIES."
IRCD Bulletin, v6 nl and 2, Spring, Summer 1970, September 1970
Jablonsky, Adelaide
ED 042-856 MF-$0.65 HC-$3.29

This issue of the Bulletin is devoted to media and media resources for teaching Afro-American studies. Contains reviews of media resources as evaluated for relevance and effectiveness by a number of participating black reviewers. Units consisting of filmstrips with records were considered more effective than either of these alone.

A CONTENT ANALYSIS OF THE TREATMENT OF NEGRO CHARACTERS IN CHILDREN'S PICTURE BOOKS 1930-1968 (1970)
Bingham, Jane Marie
Available from: University Microfilms, A Xerox Company, Dissertation Copies Post Office Box 1764, Ann Arbor, Michigan 48106 (Ordering No. 70-20,437; MF-$4.00 Xerography $10.00)
ED 060-016

The ways in which the American Negro had been depicted in the illustrations of children's picture books published between 1930 and 1968 were studied. A total of 41 books, which included 1,067 illustrations, were found on recommended book lists. The books were grouped into four historical periods: 1930-1944, 1945-1954, 1955-1964, 1965-1968. Four major categories were constructed in order to differentiate and describe the treatment of Negro characters in the book illustrations: physical characteristics, environmental characteristics, adult roles and character interaction. A coding instrument included sub-categories of the major categories which were derived from the questions posed and were based on the content analyzed and they type of analysis used. The major conclusions of the study were: (1) Negro characters were depicted in a variety of ways; most exaggerations occurred in the earliest period, and seemed to reflect the prevailing social concepts of the time; (2) Almost no important conclusions could be drawn about environmental conditions; (3) There were more Negroes in work roles in the first two periods than there were Caucasian in the last two; more Negro than Caucasian home roles were shown, and (4) The interaction among a variety of characters did not differ from period to period. (Author/DB)

THE NEGRO AMERICAN IN PAPERBACK: A SELECTED LIST OF PAPERBOUND BOOKS COMPILED AND ANNOTATED FOR SECONDARY SCHOOL STUDENTS (1968)

Penn, Joseph E.; And Others

Available from: Publications-Sales Section, National Education Association, 1201 16th Street, N. W., Washington, D. C. 20036 (Stock No. 381-11796; $.50)

This 1968 edition of an annotated bibliography on the Negro American in paperback includes over 140 additional titles and omits several titles found in the previous edition. The list does not attempt to be comprehensive, and is intended as an aid and reference guide to teachers and students to broaden their background of information about Negro Americans. Books listed range from fiction suitable for seventh-graders to those books dealing with basic problems in American society of interest to college-bound senior high school students. For each of the approximately 330 titles listed, the following information is provided: author, title, publisher, copyright date, cost, a brief annotation and a rating as to whether the item in question is suitable for high school students, junior high school students, or for both. A directory of the publishers of the items listed is also provided separately. (RJ)

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DRUG ABUSE PREVENTION: A GUIDE TO SPEAKERS Page 5

GUIDE TO INNOVATION IN EDUCATION (1970)

Hanelock, R. G.
Institute for Social Research, Center for Utilization of Scientific Knowledge
University of Michigan, Ann Arbor, Michigan

- Newsletter
- Audiovisual Newsletters
- Information Services
    1. ERIC-Educational Resources Information Center
    2. EPIE-Educational Products Information Exchange
    3. RIS-Regional Information System
    4. RISE-Research & Information Services in Education
    5. SRIS-School Research Information Service
    6. Clearinghouse For Federal Scientific & Technical Information
    7. National Audiovisual Center

Libraries

Directories & Indices

1. Directory of Education Information Centers
2. Directory of Federally Supported Information Analysis Centers
3. A Directory of Individuals, Programs & Agencies Engaged in the Study of Change
4. A Directory of Information Resource in the U.S. Social Sciences
5. Directory of Special Libraries of Information Centers
6. Educational Directory (annual directory)
7. Educational Index
8. Encyclopedia of Associations Vol. 1-National Organizations of the U.S.
9. ERIC Publications
    a. Current Index to Journals in Educ (CIJE)
    b. Pacesetters in Innovation
    c. Research in Educ
    d. Manpower Res, Inventories for 1966,7,8.
10. National Directory of Newsletters
11. N.E.A. Hardbooks
12. Research Centers Directory

Reference Books

Name, publisher, year and brief descriptions of basic reference books

Example:

Dictionary of Educ. Second edition, Carter V. Good (ed.), New York: McGraw-Hill Book Co., 1959. This edition, financed by Phi Delta Kappa, provides definitions of the terminology used in education and related disciplines.

Consulting Organizations

1. Regional Educational Laboratories gives address, focus and projects of each center.
2. IDEA-Institute for the Development of Educational Activities, Inc.
3. AED-Academy for Educational Development
4. IRS- Information Retrieval System
5. National Referral Center for Sci & Tech
6. National Center for Educational Statistics
7. Office of Information

Academic Institutions

Name, address and description of centers in state universities and teachers colleges across the nation which often provide resource services for school systems in their region--services vary greatly.

ERIC CLEARINGHOUSES

Each clearinghouse, as well as acquiring, reviewing, abstracting and indexing the documents announced in Research in Education, also prepares bibliographies and interpretive summaries of research which also appear in Research in Education and are disseminated through the ERIC Document Reproduction Service. Because clearinghouses have limited resources for providing detailed replies to inquiries for information on specific topics, educators are urged to subscribe to Research in Education to search for desired information.

ERIC CLEARINGHOUSES ON...

AC ADULT EDUCATION
Syracuse University
Syracuse, New York 13210

AL LINGUISTICS*
Center for Applied Linguistics
Washington, D.C. 20036

CG COUNSELING AND PERSONNEL SERVICES
University of Michigan
Ann Arbor, Michigan 49104

EA EDUCATIONAL MANAGEMENT
University of Oregon
Eugene, Oregon 97403

EC EXCEPTIONAL CHILDREN
The Council for Exceptional Children
Arlington, Virginia 22202

EM EDUCATION MEDIA AND TECHNOLOGY
Stanford University
Stanford, California 94305

FL TEACHING OF FOREIGN LANGUAGES*
Modern Language Association of America
New York, New York 10011

HE HIGHER EDUCATION
George Washington University
Washington, D.C. 20006

JC JUNIOR COLLEGES
University of California at Los Angeles
Los Angeles, California 90024

LI LIBRARY AND INFORMATION SCIENCES
American Society for Information Science
Washington, D.C. 20036

PS EARLY CHILDREN EDUCATION
University of Illinois
Urbana, Illinois 61801

RC RURAL EDUCATION & SMALL SCHOOLS
New Mexico State University
Las Cruces, New Mexico 88001

RE READING
Indiana University
Bloomington, Indiana 47401

SE SCIENCE & MATHEMATICS EDUCATION
The Ohio State University
Columbus, Ohio 43221

SO SOCIAL SCIENCE EDUCATION**
University of Colorado
Boulder, Colorado 80302

SP TEACHER EDUCATION
American Assoc. of Colleges for Teacher Education
Washington, D.C..20005

TE TEACHING OF ENGLISH
National Council of Teachers of English
Urbana, Illinois 61801

TM TESTS, MEASUREMENT & EVALUATION
Educational Testing Service
Princeton, New Jersey 08540

UD DISADVANTAGED
Teachers College
Columbia University
New York, New York 10027

VT VOCATIONAL & TECHNICAL EDUCATION
The Ohio State University
Columbus, Ohio 43212

ERIC CLEARINGHOUSES (CONT'D)

*Now the ERIC Clearinghouse on Languages and Linguistics; Modern Language Association; New York, New York 10011
**Now the ERIC Clearinghouse on Social Studies/Social Science Education.

For further information on ERIC, write to:

ERIC
U.S. Office of Education
400 Maryland Avenue, S.W.
Washington, D.C.20202

CURRICULUM MATERIALS

The ERIC system has contracted with University Microfilms to acquire, index, abstract and make available on microfiche, copies of curriculum materials produced by school systems, curriculum development projects and other developers of curriculum resource materials which are not commercially published.

Again, a set of descriptors are used to index these materials so that by designating the problem area(s) one is concerned with, information about some of the creative efforts of other school systems to deal witn the problem can be obtained. The address: University of Microfilms, Seeb Road, Ann Arbor, Michigan 48103.

THE FOUNDATION DIRECTORY, EDITION 4. (1971)
Lewis, Marianna O., Ed. Bowers, Patricia, Ed.
Available from-Columbia University Press, 136 South Broadway, Irvington-on-Hudson, New York 10533 ($15.00)
ED 058 919

The fourth edition of The Foundation Directory" lists and describes 5,454 foundations and surveys their grants. The directory was prepared from foundation reports and government records. The foundations listed either have assets of $500.00 or made grants totally at least $25,000.00 in the year of record. Education is the leading beneficiary of foundation support. During the past ten years, an average of 32% of all grants went to education, 15% to international activities, 14% to health, 13% to welfare, 12% to sciences, 9% to humanities and 5% to religion. Foundations located in every state, except Alaska, are included.

MUSEUMS AND MEDIA: A BASIC REFERENCE SHELF.
MUSEUMS AND MEDIA: A STATUS REPORT (1970)
Ritterbush, Philip C. and Grove, Richard.
ED 044 935 RIE April 1971 MF-$0.65 HC-$3.29

An appropriately combined state of the art paper (Grove) and annotated bibliography (Ritterbush) identifies books, papers, periodicals, and reports which reveal the important role that museums can play in elementary and secondary education.

NATIONAL AUDIOVISUAL CENTER (GSA)
Information Branch
Washington, D.C. 20409

The center serves all inquiers by furnishing information about most Federally produced audiovisual materials, lending and renting materials placed with the Center by agencies, and selling materials approved for public sale by the producing agencies.

NATIONAL AUDIOVISUAL CENTER (cont'd.)

The Center's objective is to achieve the most efficient use of Federal audiovisual materials and to furnish information on Government sources of audiovisual materials.

The Center sells audiovisual materials produced by the Atomic Energy Commission, Dept. of Commerce, Dept. of Defense, Office of Economic Opportunity, GSA, HEW, HUD, Dept. of Interior, Dept. of Justice, NASA, NSF, Post Office Dept., Small Business Admin., Dept. of State, Dept. of Transportation, US Civil Service Com., US Information Agency, Veterans Admin.

DIRECTORY OF ORGANIZATION AND PERSONNEL IN EDUCATIONAL MANAGEMENT Third Edition, 1971-2
Smith, Stuart C., Ed.
Available from-Editor's Office, ERIC Clearinghouse on Educ. Mgmt., University of Oregon, Eugene 97403 ($3.00. Make checks payable to Institute for Community Studies)
ED 058 469 MF-$0.65 HC-$3.29

A tool for locating information about research in educational management. The directory, with increased coverage of research on educational facilities, lists 254 organizations and 416 individuals. Cited for each organization is its name and address, purpose, policy for supplying information to users, geographic service areas, and topics of available publications. The personnel section cites each researcher's name, title, address, subject areas, research affiliation, and available publications. Extensive subject indexes are provided for both organizational and personnel sections. (Author)

DIRECTORY OF RESOURCES ON EARLY CHILDHOOD EDUCATION
Glassman, Lynne
Exceptional Children, v37 n9, May 1971. 10 pp., (Journal Article)

Listed in this article are some of the laboratories, centers, organizations, and major publications which focus on early childhood education.

This article was published in June 1971 as a separate special publication giving more detailed descriptions of publications available from the laboratories, centers, and organizations.

A BRIEF GUIDE TO NEWSLETTERS IN EARLY CHILDHOOD EDUCATION. An Annotated Bibliography
Allgaier, Janet F., comp.
ED 048 932 RIE July 1971 MF-$0.65 HC-$3.29

The 31 informative newsletters and bulletins listed are concerned directly with, or related to, the field of early childhood education. Each listing contains the publication's title, scope, frequency of publication, and subscription information.

BIBLIOGRAPHY INDEX
Wilson Company
New York, N.Y.
A cumulative bibliography of bibliographies arranged alphabetically, produced each hear.

THE VOLUNTEER--AN EDUCATIONAL RESOURCE. (Literature Review)
Heathman, James E.
ED 048 981 RIE July 1971 MF-$0.65 HC-$3.29
This paper discusses the use of volunteer workers (non-working mothers, senior citizens, university students) as a low-cost educational improvement. In the paper, specific volunteer programs are descirbed, and suggestions are presented for teachers working with volunteers and possible activities with which a volunteer might assist.

THE VOLUNTEER COMMUNITY: CREATIVE USE OF HUMAN RESOURCES (1971)
Schindler-Rainman, E. and Lippitt, R.
Available from-National Training Laboratories, Arlington, Virginia. $4.95
The motivation, recruitment, orientation and training of volunteers are discussed against a background of social trends and issues.

DRUG ABUSE PREVENTION: A GUIDE TO SPEAKERS. NATIONAL CLEARINGHOUSE FOR DRUG ABUSE INFORMATION REPORT SERIES 19, NO. 1 (1971)
Available from-National Clearinghouse for Drug Abuse Information,
5600 Fishers Lane, Rockville, Maryland 20852
ED 059 907 MF-$0.65 HC-$3.29
A resource for persons requiring knowledge about speaker's bureaus concerned with drug abuse prevention throughout the country. Information is derived from the National Clearinghouse for Drug Abuse Information National Inventory of Drug Abuse Programs, part of a comprehensive computerized information-retrieval system covering the field of drug abuse. The guide reflects only those drug abuse programs which have been brought to the attention of the Clearinghouse and which have reported an active speaker's bureau. No attempt at evaluation or assessment of program effectiveness or speaker's bureau is made. Identifying data include program name, address, telephone number, and director's name. Three hundred sixty-four programs in 48 states (excluding New Mexico and Oklahoma), District of Columbia, and the Canal Zone are listed. (BL)

BEST COPY AVAILABLE

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STUDENT PARTICIPATION IN ACADEMIC GOVERNANCE, REVIEW 1. (1970)

Robinson, Lora H.; Shoenfeld, Janet D.
ERIC Clearinghouse on Higher Education, Washington, D.C.
ED035786 MF-$1.65 HC-$3.29

This report deals with the growing student role in college and university administration. It contains an essay reviewing trends and findings in the literature, a lengthy annotated bibliography, and a compendium of recent institutional changes which have increased student participation in governance. The bibliography is divided into 6 sections: Surveys of Current Practices, Surveys of Attitudes, Arguments For, Against and About Student Participation, Hypothetical Models of Governance, Methods of Increasing Student Involvement, and Institutional Proposals to Increase Student Involvement or Establish New Governance Structures. The compendium covers: Addition of Students to Existing Bodies, Formation of New Committees, and New Governance Structures. Most of the items in the compendium are concerned with changes in private institutions of higher education. (JS)

STUDENT ACTIVISM--AN OVERVIEW (1970)

Heathman, James E.
ED 045 250 RIE April 1971 MF-$0.65 HC-$3.29

Methods for bringing about greater student involvement in school affairs, along with handling of different forms of student protest, are offered.

STUDENT CODES: A PACKET ON SELECTED CODES AND RELATED MATERIALS. (1971)

Available from-Center for Law and Education, Harvard University, 38 Kirkland Street, Cambridge, Massachusetts 02138 ($5.00)
ED 059 540 MF-$0.65 HC-$9.87

This report discusses various types of student codes, presents the need for such codes, outlines court challenges of these codes, and provides guidelines for drafting codes. Sample codes in the packet include city-wide codes from eight cities, four Statewide policy statements, and selected model codes. (JF)

A STUDY OF THE OBJECTIVITY OF MATERIALS USED IN CURRENT EVENTS INSTRUCTION IN SECONDARY SCHOOL SOCIAL STUDIES CLASSROOMS. (1966)

Lowe, William T.; Purrington, Gordon
Cornell Univ., Ithaca, N.Y. School of Education.
ED0 14796 MF-$0.65 HC-$3.29

The five classroom periodicals with the largest circulation in the New York area are compared with the three best selling adult news publications, the best selling conservative journal of opinion, and the best selling liberal journal of opinion to determine if the use of classroom periodicals in high school Social Science courses is justified on the basis of their greater objectivity and freedom from bias. A panel of knowledgeable Social Science and History teacher-scholars were asked to rate and rank various treatments of the same topic in terms of the objectivity and conservatism of the presentation, using instruments prepared by the researchers. (HM)

INTERPRETING THE NEWSPAPER IN THE CLASSROOM: FOREIGN NEWS AND WORLD VIEWS (1971)
Nesbitt, William A.
Available from-Foreign Policy Association, 345 East 46th Street, New York, New York 10017 ($2.50: Paperback)
EDO 56945

This classroom text is intended to assist teachers in educating students as consumers of the mass media, especially in messages from abroad. The subject has two major aspects: 1) the student's own limitation, and 2) the effects of human frailty in gathering and presenting the news. The newspaper is emphasized over other news media in this book. Several articles provide discussions on the intellectual background on the press, the processing of news, evaluation of the press, and comparative case studies of news coverage. Suggestions for in- and out-of-class exercises are the focus of one whole chapter, and the final chapter consists of five readings: 1) "How to Use Daily Newspapers." 2) and 3) texts of recent speeches prompted by criticism of the press, 4) "The Press and the Bay of Pigs," and 5) "Communication Analysis and Comprehensive Diplomacy." The contents of the book are suited for direct classroom presentation, either by incorporation in discussions or reading assignments. (Author/AWW)

CONSUMER EDUCATION BIBLIOGRAPHY. (1971)
Available from-Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 ($1.00)
EDO 56962 MF-$0.65

This second edition, annotated bibliography contains over 4,000 books, pamphlets, periodical articles, audiovisual aids, and teacher materials relating to consumer interests and consumer education. The recent proliferation of materials has made it impossible to produce an exhaustive listing. The authors instead have attempted to provide an overview of the field which will be useful to consumers, educators, school and public libraries, and community information centers. Major categories in the bibliography are: consumer classics; consumer and the economy; consumer behavior; consumer protection; fraud, deception and other consumer concerns; agencies and organizations providing services and sources of redress for consumers; consumer and the environment; money management; consumer goods and services; consumer education; and childrens' books. A subject index is provided. ED 037 560 is the first edition of the bibliography. (Author/JLB)

CONSUMER EDUCATION IS AN AGE OF ADAPTATION. EDUCATOR RESOURCE SERIES. (1971)
Campbell, Sally R.
Available from-Association Sterling Films, Inc., 512 Burlington Avenue, LaGrange, Illinois, 60525 ($5.00)
ED 060 210 MF-$0.65

This publication contains ideas and information to help teachers modify content and teaching methods to assist students in coping with the changing marketplace. Part 1 of the guide lists educational objectives for these major content areas: (1) The Consumer and the Economy, (2) Values and Goals, (3) Occupation and Income, (4) Management of Resources, (5) Economic Choices, (6) Advertising, Selling Aids, and Motivators, (7) Buying Goods and Services, (8) Housing, (9) Insurance Protection (10) Savings and Investments, (11) Taxes, (12) Consumer Grievances, Information, Credit, Protection, Rights, and Responsibilities, and (13) The Consumer and the Environment. Part 2 provides general suggestions for adapting programs to meet student needs as well as specific suggestions for adapting to cultural differences, age differences, differences in learning ability, and differences in economic characteristics. Part 3 offers several questionnaires, surveys, and opinionnaires to use in identifying, motivating, and evaluating students. Parts 4 and 5 contain a bibliography of readings and a glossary of consumer terms. (SB)

DEVELOPING A RESOURCE CENTER IN CONSUMER EDUCATION: AN ANNOTATED BIBLIOGRAPHY. (1971)
Garman, E. Thomas; And Others
Available from-Northern Illinois University, Business Education Department, Wirtz 323, DeKalb, Illinois 60115 ($2.00)
ED0 58137 MF-$0.65 HC-$6.58

Annotated bibliography of over 1300 items--The resource materials included, mostly booklets and pamphlets for classroom use, are arranged according to 18 basic content areas, with subdivisions for booklets and pamphlets, audio-visual materials, and learning packages for teachers and students. Topics include: the dilemma of the consumer, the consumer identified, the consumer in the American marketplace, the changing role of the consumer, buying services, sundry products, credit, clothing, food, automobiles, home furnishings and major appliances, housing money management, savings, investments, life insurance, taxes, and careers. The publication also includes three separate chapters entitled, Bibliographies, Catalogues, and Other Sources for Teaching Materials, Mailing Lists for Your Resource Center, and Journals and Magazines in Consumer Education. Criteria for selection of materials included: usefulness with secondary school students, cost and availability, and objectivity. The small number of annotations in some areas was due to limitations of time and resources. (Author/JLB)

ENVIRONMENTAL-ECOLOGICAL EDUCATION: A BIBLIOGRAPHY OF FICTION, NONFICTION, AND TEXTBOOKS FOR ELEMENTARY AND SECONDARY SCHOOLS. (1971)
Watt, Lois B., Comp.; Thomas, Myra H., Comp.
ERIC Clearinghouse for Social Studies/Social Science Education, Boulder, Colo.
ED055937 MF-$0.65 HC-$3.29

This bibliography of juvenile literature, textbooks, and professional resources for teachers is based on acquisitions received between January 1st 1969 and May 25, 1971, by the Educational Materials Center of the National Center for Educational Communication. The books annotated within have not been evaluated, however, they have been selected on the basis of three criteria: 1) publication during this period; 2) critical reception or favorable review by at least two professional journals; and, 3) ecological content. The nonfiction juvenile titles in the first two sections divide around three themes: 1) the problems endangered species of animals and plants, overpopulation, hunger, pollution; 2) the natural resources available and their utilization as the basis of the solution of the problems; and, 3) surveys of what has been done in recent years to repair the ecological damage. Biographies, animal stories, and conservation and ecology picture books are included in the second section. The next part describes fifteen juvenile fiction books about encounters between animals and people, imagined or fictional, but relevant to everyday happenings; some are fantastic in nature. Science and social studies texts are listed in the fourth section with teacher resources in the fifth. The review sources, and author and title indices are appended. (Author/SBE)

SELECTED BIBLIOGRAPHY AND AUDIOVISUAL MATERIALS FOR ENVIRONMENTAL EDUCATION. (1971)
Minnesota State Dept. of Education, St. Paul. Div. of Instruction.
ED051069 MF-$0.65 HC-$3.29

This guide to resource materials on environmental education is in two sections: 1) Selected Bibliography of Printed Materials, compiled in April, 1970; and, 2) Audio-Visual materials, Films and Filmstrips, compiled in February, 1971. 99 book annotations are given with an indicator of elementary, junior or senior high school levels. Other book information includes: publisher, copyright date, price and Dewey Decimal classification. Also listed in this section are six periodicals and some free and inexpensive materials such as pamphlets, arranged by level: primary, intermediate, and junior or senior high school. This last section for secondary grades is subdivided into specific topics: 1) Man and Natural Resources, 2) Population Explosions, 3) Problems of the Cities, 4) Pollution, and 5) Relationship of Man to Communities. A brief content annotation is given as well as running time, color, producer copyright data (when available), rental fee and film order number from the University of Minnesota. Appended is a list of nine additional Audiovisual Rental Sources and addresses of 27 film companies. (Author/JSB)

EXPLORING THE WORLD. AN ENVIRONMENTAL EDUCATION HANDBOOK FOR STUDENTS.
Billings Public Schools, Mont.; Eastern Montana Coll., Billings.
Ed 059 082 MF-$0.65 HC-$6.58

Written principally for students in grades five through seven, the handbook furnishes experiments, investigations, and field studies for students to complete largely on their own. Gaining a foundation of the skills and knowledge to become environmentally literate citizens is the goal of the activities. Units of study consider plant ecology, aquatic ecology, plot studies, environmental degradation, geography, and measurement. Each exercise outlines general background information, objectives, and procedures for conducting the activity followed by a data sheet to record the observation. A key to the woody plants of the Beartooth Mountains is appended. (BL)

K-12 CURRICULUM GUIDE FOR ENVIRONMENTAL EDUCATION. (1970)
Colorado State Univ., Ft. Collins.; Poudre School District R-1, Ft. Collins, Colo.
ED 059 926 MF-$0.65 HC-$6.58

Seventy-two multidisciplinary environmental themes are identified for instruction in grades K-12. Each theme is presented with behavioral objectives, key concepts, and both in school and out of school activities. The outdoor activities are heavily emphasized, and designed for a local nature center, public parts, and campgrounds. Disciplines incorporated together and separately in the themes are: science, social studies, math and humanities. The guide recommends that the themes be taught in conjunction with the regular curricula, when appropriate. Supplementing each theme group (K-3, 4-6, and 7-12) are extensive resource guides to films, recordings, filmstrips, pamphlets, and books. A final section presents ideas and information for teachers in planning outdoor experiences, such as: literature and music for the outdoors, and how to read a compass. (DJB)

A REVIEW OF ENVIRONMENTAL EDUCATION FOR ELEMENTARY AND SECONDARY SCHOOL TEACHERS, VOLUME I of III, Final Report.

Helgeson, Stanley L. And Others
Ohio State Univ., Columbus. Research Foundation.
ED 059 913 MF-$0.65 HC-$6.58

Following a general orientation, specific problems and needs are identified and research related to these is noted. Current practices concerning environmental education programs and materials are summarized together with recommendations regarding their development and implementation. Brief descriptions of selected programs and materials and case studies describing program development and implementation are included. Sources of information for supplementary materials are also listed. A copy of the Environmental Education Curriculum Analysis Instrument, along with a summary of learning approaches to environmental education, conclude the work. (DL)

ENVIRONMENTAL EDUCATION: SOCIAL STUDIES SOURCES AND APPROACHES.

Henderson, Martha T.
ED 042 062 MF-$0.65 HC-$3.29

Elementary and secondary social studies teachers are alerted to new approaches to projects and materials in environmental education. Included are descriptions of programs which encourage individual inquiry; emphasize interaction between man and his environment; utilize the local environment or community; and, programs emphasizing "man in society"--the study of values, and related political, social, economic, legal and ethical ideas.

A REVIEW OF ENVIRONMENTAL EDUCATION FOR SCHOOL ADMINISTRATORS, VOLUME III OF III. FINAL REPORT.

Helgeson, Stanley L. And Others
Ohio State Univ., Columbus. Research Foundation.
ED 059 915 MF-$0.65 HC-$6.58

Following a general orientation, specific problems and needs are identified and research related to these is noted. Current practices concerning environmental education programs and materials are summarized together with recommendations regarding their development and implementation. Brief descriptions of selected programs and materials and case studies describing program development and implementation are included. Sources of information for supplementary materials are also listed. A copy of the Environmental Education Curriculum Analysis Instrument, along with a summary of learning approaches to environmental education, conclude the work. (BL)

A REVIEW OF ENVIRONMENTAL EDUCATION FOR TEACHERS OF URBAN/DISADVANTAGED, VOLUME II OF III. FINAL REPORT. (1971)

Helgeson, Stanley L. And Others
Ohio State Univ., Columbus. Research Foundation.
ED 059 914 MF-$0.65 HC-$6.58

Following a general orientation, specific problems and needs are identified and research related to these is noted. Current practices concerning environmental education programs and materials are summarized together with recommendations regarding their development and implementation. Brief descriptions of selected programs and materials and case studies describing program development and implementation are included. Sources of information for supplementary materials are also listed. A copy of the Environmental Education Curriculum Analysis Instrument, along with a summary of learning approaches to environmental education, conclude the work.

A NEW LOOK AT REALITY IN THE HIGH SCHOOLS OR WHY THE SECONDARY SCHOOL RESEARCH PROGRAM? (1971)
Baird, Leonard L.; Peterson, Frederick A. Phi Delta Kappan; 53; 7; 427-431
Mar 71
EJ035729

Describes a research instrument for conducting environmental research in secondary schools. (MP)

OUTDOOR LABORATORY DEVELOPMENT
Busbee, Cyril B.
South Carolina State Dept. of Education, Columbia.
ED 059 079 MF-$0.65 HC-$3.29

Guidelines for developing an outdoor, educational laboratory are offered in this booklet. Stress is placed on establishing a laboratory that can be used with all aspects of the school's existing curriculum. Items regarding organization of a planning and guidance committee, user requirements, construction considerations to maintain the natural environment, and unique design features are elaborated. Also included is a checklist to aid in identifying environmental-conservation activities that can be conducted on school property, a bibliography, and a sample layout plan for an outdoor laboratory. (BL)

THE TWENTY-ONE ESSENTIAL READINGS IN POPULATION EDUCATION. (1970)
Burleson, David
North Carolina Univ., Chapel Hill. Carolina Population Center.
ED050004 MF-$0.65 HC-$3.29

This generously annotated bibliography of readings is is a useful aid in sifting through a growing amount of material. The items include monographs, textbooks, journal articles, and government documents, most of which were published within the last two years. Price and availability information is included for each entry. In addition to providing a broad view of the field of population education, the items are indicative of the organizations, institutions, and individuals to whom educators might turn for assistance and information. The readings cover such issues as: national and international family planning education into the curriculum; and guides for the classroom teacher. (JLB)

THE WORLD POPULATION CRISIS. WHAT IT IS AND WHERE TO GET INFORMATION ABOUT IT. (1968)
Available from-Foreign Policy Association, 345 East 46th Street, New York, New York 10017 ($1.00)
ED053019

The present and future outlines of the population crisis are described in an article by Philip Hauser, and the role of responsible citizens in this crisis is the topic of an article by John D. Rockefeller III. Following this introduction is a complete resource guide for teachers. All classes of materials are reviewed, including background readings, statistical sources, classroom and student material, and films. A list of institutional resources is provided, with complete description of their purposes and the kinds of material they offer. Inductive teaching strategies suited to the study of population are suggested, along with specific methods for incorporating the study of population into the curriculum. (JLB)

THE FAMILY IN SEARCH OF A FUTURE: ALTERNATE MODELS FOR MODERNS (1971)
Hamil, Ralph, Futurist; 5; 4; 166-168
EJ043343

The increase of divorce and sexuality outside marriage has challenged the traditional institution of marriage. Fifteen experts offer provocative suggestions of what might replace it, including, possibly, polyandry, student marriages, polygamy, and group sex. (Author/CJ)

CURRENT PUBLICATIONS IN POPULATION/FAMILY PLANNING, NUMBER 18. (1972)
Available from-The Population Council, 245 Park Avenue, New York, New York 10017
ED 059 904 MF-$0.65 HC-$3.29

Abstracts of current publications in the fields of population and family planning are presented in this pamphlet. Topical areas include: demography and social science, human reproduction and fertility control, family planning programs, population policy, and general publications. Research studies, monthly reports, journal articles, and general literature are reported. (BL)

AN INTERNATIONAL PERSPECTIVE ON VARIOUS ISSUES IN SEX EDUCATION AS AN ASPECT OF HEALTH EDUCATION. (1969)
Bjork, Robert M. J Sch Health; 39; 8; 525-535
EJ 008998

THE PREGNANT AND THE MARRIED HIGH SCHOOL STUDENT IN THE EDUCATION JOURNALS OF THE 1960'S (1971)
Dempsey, John J.; Ravacon, G. Patricia Journal of School Health; 41; 8; 438-441
EJ044933

The purpose of this literature search was to determine the nature and extent of national changes in education policy and programs for married and pregnant students of high school age in the 1960's as reflected by education journals. (Author)

THE OLD AND THE YOUNG IN MODERN SOCIETIES (1970)
Neugarten, Bernice L. American Behavioral Scientist; 14; 1; 13-24
EJ029108

In industrialized countries lacking a tradition of valuing older adults, age-ism may increase, but only until old people become more youthful and the importance of age differentiations diminishes. (DB)

MEASURES PERTAINING TO HEALTH EDUCATION I. SMOKING. AN ANNOTATED BIBLIOGRAPHY. (1972)
Guthrie, P. D.
ERIC Clearinghouse on Tests, Measurement, and Evaluation, Princeton, N. J.
ED 060 042 MF-$0.65 HC-$3.29

THE DRUG PROBLEM AND THE SCHOOLS. ERIC ABSTRACTS. (1971)
ED 047 430 MF-$0.65 HC-$3.29

Resumes of 36 ERIC documents that were announced in Research in Education through December 1970 are listed. A subject index is cross-referenced.

PROGRAMS ON DRUG USE AND ABUSE.
Sloan, Nancy E.
Personnel Services Review. Series 5. Contemporary Issues in Student Personnel Work. November 1970. 16pp. (Literature Review)

ED 044 762 MF-$0.65 HC-$3.29

This is one of a series intended for use by counseling practitioners to aid in the development of programs and attitudes on drug abuse through exploration of: (1) models of practice; (2) generalizations; (3) action possibilities; and (4) methods of implementation.

SELECTED READINGS FOR THE PROFESSIONAL WORKING WITH DRUG RELATED PROBLEMS. (1970)
Wisconsin Univ., Madison.
ED 058 579 MF-$0.65 HC-$3.29

A bibliography of selected readings compiled at the University of Wisconsin for the National Drug Education Training Program. These selected readings include information on narcotics, amphetamines, mescaline, psilogybin, hallucinogens, LSD, barbiturates, alcohol, and other stimulants. The intended user of this bibliography is the professional practitioner working with drug ralated problems. Full bibliographic information is cited, as well as number of pages in each title. (MA)

TRENDS, FORECASTS
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ALTERNATIVE FUTURES FOR LEARNING: AN ANNOTATED BIBLIOGRAPHY OF TRENDS, FORECASTS, AND PROPOSALS. (1971)
Marien, Michael D.
Available from-EPRC Publications, 1206 Harrison Street, Syracuse, New York 13210 ($5.00)
ED051571 MF-$0.65

This bibliography of materials relevant to educational policymaking is confined to trends, forecasts, and proposals -- i.e., documents on changes that are taking place, on future states of affairs, and on recommended changes. The material is organized into seven sections: (1) general, (2) elementary and secondary, (3) higher education, (4) other educating institutions, (5) planning and plans, (6) miscellaneous, and (7) addenda. More than 80 percent of the 936 items cited are books or book-length documents. Four indexes are supplied: major author, organization, selected subject, and bibliographic. (Author/MLF)

INDICATORS OR TRENDS IN AMERICAN EDUCATION (1969)
Ferriss, Abbott L.
Russell Sage Foundation, 230 Park Avenue, New York, New York
From Introduction

This volume presents statistical time series on trends in education in the United States. The principal purpose is to bring together time series that indicate changing characteristics of education considered both organizationally and as a characteristic of the population. An extensive bibliography is included.

CULTURAL CHANGE AND THE CURRICULUM: 1970-2000 A.D.
Shane, June Grant; Shane, Harold G. Educ Technol; 10; 4; 13-18 70
EJ019691

A discussion of the implications for education of changes the future will inevitably bring. (LS)

EDUCATIONAL AND SOCIAL DEMANDS ON THE SCHOOLS. ANALYSIS OF LITERATURE AND SELECTED BIBLIOGRAPHY. (1970)
Analysis and Bibliography Series, Number 1.
ED 043 110 MF-$0.65 HC-$3.29

An analysis of literature dealing with the expectations and demands of the public for their schools pays particular attention to the research assessing variations in such expectations and demands. A 65-item bibliography is included.

FUTURE SHOCK (1970) AND LEARNING FOR TOMORROW (1974)
Tuffler, Alvin
Random House, Inc., 201 E. 50th St., New York, New York 10022